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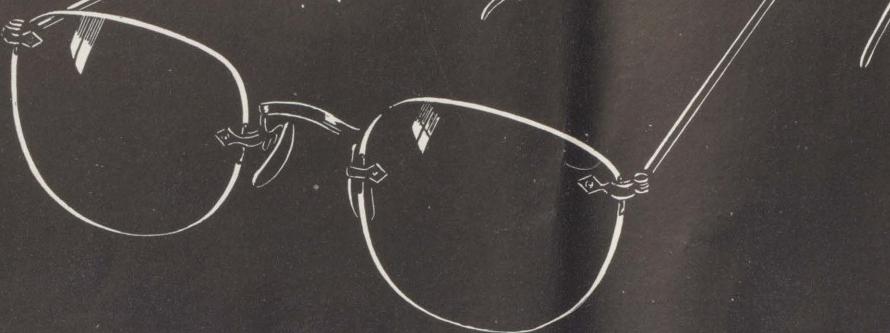


AUGUST
1945

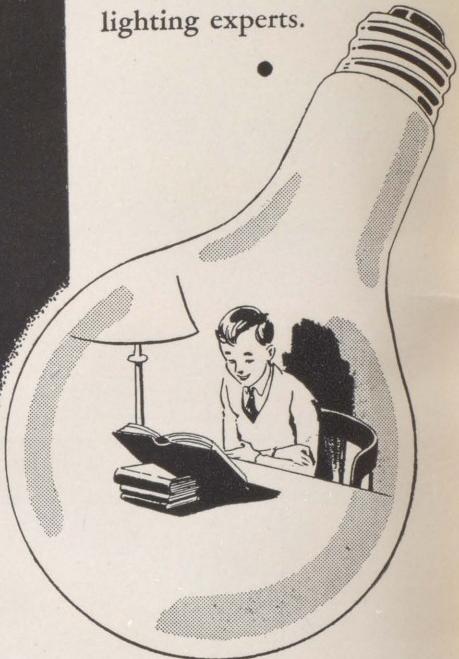
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THE MACDONALD COLLEGE JOURNAL



The Continuing War

Although the collapse of Japan has now become a fact there still remains several fronts on which the pressure must be kept up if, in any real sense, we are to be able to say that the victory and the peace are ours.

Destitute peoples in Europe and Asia must be fed and clothed. For us in Canada, this means a maintenance of production of foodstuffs, a ready and co-operative acceptance of meat and other rationing; the continued careful use of supplies of all kinds and a generous response to the appeals for clothing and help. We need no better example than that of Great Britain where the ration level has been reduced to a point lower than that prevailing *at any time during the war years*, in order that supplies may be made available for liberated countries.

The peril of inflation must be met. It will be necessary to continue savings and to maintain respect for price controls in a period when temptation to over-spending will be great. The coming Ninth Victory Loan will be a very real part in this whole effort.

These are very practical and definite things to do. There is a third quite as important, if less easy to define. It is the task of overcoming the social and psychological obstacles to reconstruction.

Political and racial suspicions always increase in critical times. The danger is great that we may come out of the war unable to work with people and groups who must be included if social reconstruction is to be anything like complete. As the struggle for actual survival ends we become aware again of the minor divisions and secondary problems that separate men into competing groups. The clamorous fear of Russia in the international field has its counterpart in nearly every community. We may too easily divide into conservatives and radicals, socialists and free-enterprisers, Anglo-Saxons and foreigners, perhaps even Protestants and Catholics, forgetting the splendid achievements of years when under the stress of emergency we were united in effort.

The tasks to be undertaken are too staggering, the opportunities too great for human energy to be spent in useless contention. The willingness to work for the general welfare alongside of people with whom we do not always agree will do more than anything to win the peace.

The Dominion-Provincial Conference

As we go to press hope is rising for the success of the conference of the provinces and the Federal Government.

The future welfare of every Canadian is at stake in this meeting. For rural people the stake is even bigger than for city dwellers. They suffer more from an antiquated tax system, the lack of social legislation and the absence of a thorough-going programme of conservation of national resources, while indirectly the effect of unemployment is as great for them.

A comprehensive brief has been submitted to the conference by the Canadian Federation of Agriculture on behalf of the farmers of Canada. The brief urges that stability in prices of farm products be maintained, that consultation between Dominion and provinces on agricultural production be continued, that agricultural research be co-ordinated and expanded and that a suitable dominion marketing act and a dominion co-operative act be passed.

Years of hard experience have surely contributed to our understanding since the ill-fated first attempt that followed the Rowell-Sirois report.

In the years between, Canadians have distinguished themselves not only in war but in the councils of the Nations. It will not be understood abroad or forgiven at home if our leaders fail to work out a basis of co-operation between our governments at this meeting.

The Cover Picture

was taken by the Editor at the Ormstown Fair.

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The World Food Picture

Just how serious is the world food shortage many of our leading food officials in Canada have been talking about?

Grave enough, according to a set of figures released by the combined food board at Washington recently, and quoted by Britain's food minister, Col. Llewellyn, in an article in the "Farmer and Stock Breeder" containing an appeal from the British food minister for maintenance of British food production.

The statement shows that the world meats and bacon shortage, for instance, is not far short of two million tons, that the shortage in oils and fats is 1.4 million tons, in sugar 1.8 million tons, in canned milk and milk powder, 560 thousand tons, in cheese 96,000 tons.

Col. Llewellyn's announcement of further cuts in the British food rations, which were made effective May 27, came as a distinct shock to British consumers, according to the article in the "Farmer and Stock Breeder." The article goes on to say:

"A big reduction in sugar rations is made in Britain, but the U.S.A. and Canada are accepting even bigger cuts in their current consumption, (of sugar). No meat can be expected from the U.S. during the third quarter of this year, Canada has undertaken to make substantial additional quantities of meat available but it will only be possible to maintain a total consumption per head in the U.K. during the latter part of this year, of 106 lbs. compared with 115 lbs. in 1944."

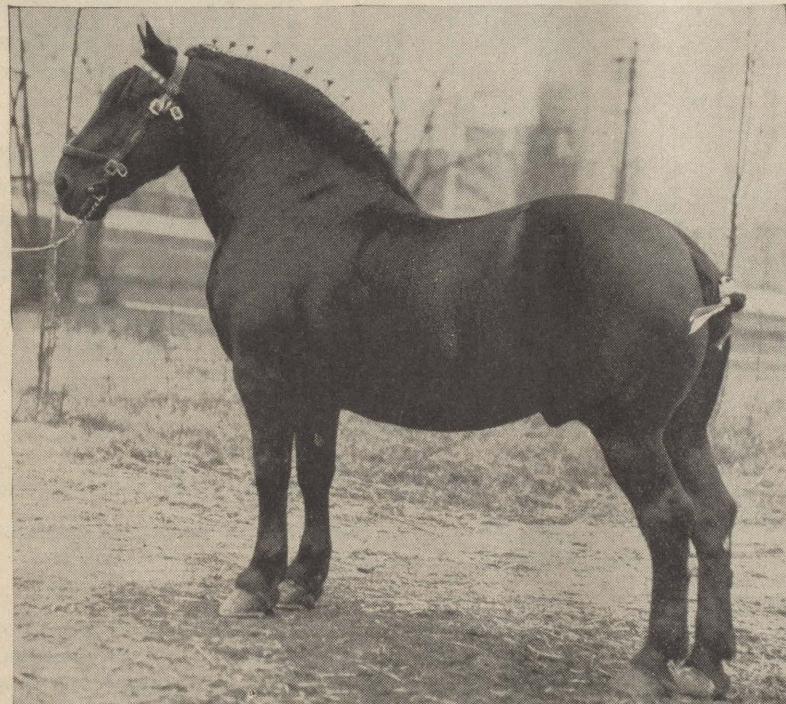
The British ration cuts were as follows: Meat, $\frac{1}{7}$ of

the ration to be corned beef; bacon reduced from 4 to 3 ounces, cooking fats from 2 to 1 oz.; soap reduced from $\frac{1}{8}$ th; sugar ration maintained, but the Christmas bonus of $\frac{1}{2}$ lb. is out; cheese ration continues as at present. Canned meats points cut from 24 to 20.

The following table, which was released in Britain by Col. Llewellyn, gives the over-all world food picture, showing estimates of world food supplies and requirements for 1945, based on consumption levels prevailing in the early part of 1945. It includes requirements of liberated Europe, but excludes Jap-held territories. The estimates were worked out by the combined food board at Washington.

Commodity	Requirements in 1,000 tons	Supply from current pro- duction in 1,000 tons	Gross Deficit in 1,000 tons
Meat and Bacon (carcass weight equivalent)	15,179	16,974	1,795
Canned fish (pack year beginning July 1st)	418	801	383
Cheese	706	802	96
Canned milk (full cream)	1,999	2,424	425
Milk powder (full cream and skim)	456	605	149
Butter	1,204	1,204
Fats and oils (edible and and technical)	5,687	7,124	1,437
Sugar (refined)	8,067	9,920	1,853

The figures cover the full range of production and consumption in the United Kingdom, North America, Australia and New Zealand, but only export supplies or import requirements for all other countries.



Well-Known Percheron Dead

Captivator, (No. 12942) 186715 on the Canadian National Livestock Records, one of the most famous of the string of Percheron stallions known as the "Black Horses" and owned by Dawes Brewery, Montreal, is dead.

Sired by Carvictor out of Casilda, this well-known stallion had reached the grand old age of twenty-one years when it was decided that for humane reasons he should be put away.

He was Champion Percheron stallion of Canada in 1932, '33 and '34, and had won Grand Championships at the Canadian National Exhibition, Toronto, the Royal Winter Fair, Toronto, the Quebec Provincial Exhibition, the Central Canada Exhibition, and the Royal Winter Fair, Sherbrooke, and many other trophies and prizes. He probably held the highest breeding record of any Percheron in Canada, his average of foals to mares bred being about 75%.



THE WARTIME PRICES AND TRADE BOARD

FARMERS' BULLETIN

ALL COMMERCIAL SLAUGHTERING NOW UNDER PERMIT CONTROL

As the first step in the re-imposition of meat rationing, all slaughtering of livestock in Canada was placed under permit control on July 9, 1945, except in the case of farmers who slaughter for their own or their farmer neighbor's use. All commercial slaughterers of cattle, calves, sheep, lamb or hogs must now have a Wartime Prices and Trade Board slaughter permit to carry on business. Applications should be made to the nearest Board office.

With one important exception, the regulations governing farm slaughtering are the same as when meat rationing was in effect previously. Under the new order, any excess of meat over the farmer's or his neighbor's needs may be sold only to the holder of a regular slaughter permit.

The minimum amount which a farmer may sell to such a permit holder is one quarter of beef and half a hog carcass. Sheep, lamb or calves slaughtered by the farmer for his own or his neighbor's use may not be sold into the meat trade.

Any farmer who regularly slaughters cattle, calves, sheep, lamb or hogs for the meat trade requires a regular slaughter permit and must stamp all carcasses with his permit number and the number indicating the quality.

Holders of slaughter permits who purchase beef or pork from farmer slaughterers not holding permits must stamp the meat in the regular manner and must submit a record of all such purchases in their returns.

MEAT IN COLD STORAGE LOCKERS

When meat rationing goes into effect, all persons holding meat in cold storage lockers will be required to surrender coupons.

PREMIUM FOR SPRING LAMB

The wholesale and retail price ceilings for spring lamb have been extended to August 31 for the 1945 lamb

crop. This action has been taken to discourage the slaughtering of unfinished lamb and will increase the volume of meat by allowing time for growing and maturing. Under earlier schedules the higher price ceiling for lamb ended on July 15.

NEW POTATO PRICES

First seasonal reduction from the producer ceiling price for new potatoes came into effect July 22 with further seasonal adjustments on July 28. Shippers' maximum prices are based on ceilings set for Harrow, Ontario, and Vancouver, B.C., plus transportation costs not to exceed 40c per 100 lbs. Growers' ceilings for the various price periods are \$3.75 per cwt. up to July 21; \$3.50 from July 22 to July 28; \$3.25 from July 29 to August 11; \$3.00 from August 12 to August 31.

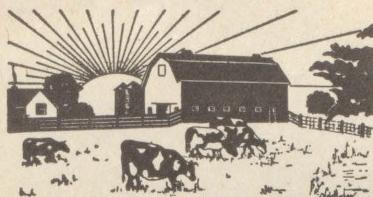
SUGAR FOR CANNING

Ten preserves coupons P4-P13 became valid July 19 for purchase of sugar for canning. Each coupon is good for the purchase of $\frac{1}{2}$ pound of sugar so that an additional five pounds of sugar for canning can now be obtained. Two preserves coupons became good on March 15 for sugar for canning. On May 17 eight preserves coupons were declared valid for the purchase of sugar for canning, each of these coupons worth $\frac{1}{2}$ pound. With the ten coupons valid on July 19, twenty coupons have been made available for the purchase of ten pounds of sugar for canning. This is in addition to the regular preserves coupons two of which become valid each month and the regular sugar allotment through the sugar coupons. The twenty coupons for sugar for canning still remain valid until declared invalid and plenty of notice will be given before such action is taken.

HARVEST HELP RATIONS

Farm workers employed for more than two weeks should provide their own ration books. If help is hired for less than two weeks special ration coupons for the men's meals may be obtained from the Local Ration Board. The applicants must list the number of extra men employed, complete details of the work and the number of days the men will be hired.

For further details of any of the above orders apply to the nearest office of the Wartime Prices and Trade Board



AGRICULTURE

Articles on problems of the farm

Dollard Red Clover

by J. N. Bird

An account of the development, superior qualities, and production of a better red clover for Quebec dairymen, the result of fifteen years of painstaking work.

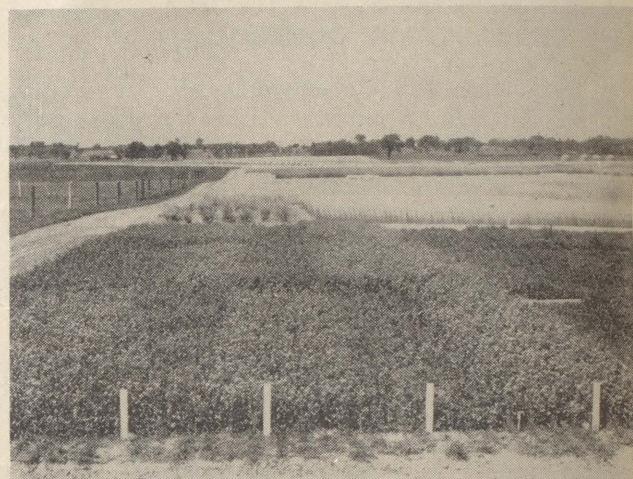
A low-cost, high-protein roughage is regarded as a basic necessity by all dairymen. It is most likely to be obtained through the use of a well-adapted legume, such as red clover. The red clover commonly grown in Quebec is less adapted than it might be as a result of frequent large importations of less hardy red clover seed brought in from foreign sources, especially in seasons following severe winter-killing.

There has been a long-standing need for the development and maintenance of a better-adapted variety which would be less subject to winter-killing and more reliable from year to year, thus diminishing the need for large importations of seed from outside sources. Dollard is a variety of red clover developed at Macdonald College to meet this need and it deserves the attention of all red clover growers in Quebec.

Although extensive plot testing and seed multiplication of this variety began in 1931, it had its origin in foundation material introduced at Macdonald College as far back as 1911. Careful attention to its breeding, both before and since 1931, has served to develop and maintain those characters that have made this variety the one best adapted for Quebec.

Higher Yield

Since 1931, it has been tested fairly extensively in comparison with other varieties at experimental stations in Eastern Canada and also to a limited extent at stations widely scattered through the Northeastern United States.



Red clover variety test at Macdonald College.

In all of these tests, it has given a very good account of itself, but especially in tests conducted in the Province of Quebec. In Provincial Comparative Tests at three experimental stations in the Province, it has yielded 16 per cent higher than the average of all other varieties included in the tests at Macdonald College, 8 per cent higher than the average of all others at Lennoxville and 20 per cent higher at Ste. Anne de la Pocatière.

Its superior yielding ability, however, is not due to characters that may be readily observed. As a matter of fact, it resembles other early, double-cut varieties of red clover so closely as to be scarcely distinguishable from them. Its winter-hardiness, perhaps the factor most responsible for its superior yield, is only observed following severe winters. Its disease resistance is only revealed in the presence of an epidemic of a disease to which red clover is subject. Its vigour is very closely associated with both winter-hardiness and disease resistance.

There are a few differences of lesser importance that serve to distinguish Dollard from the red clover commonly grown in Quebec. In the fall of the seeding year, it does not bloom so freely in the stubble after the removal of the grain crop. In the following year, it does not commence to bloom quite so early and continues to bloom over a slightly longer period when not cut for hay. Its stems are less hairy and a larger proportion of its leaves lack the "spot" or "marking" so characteristic of ordinary



Survival of Dollard (centre) in comparison with two other varieties of Red Clover following the second winter.

Rationing helps the FARMER HERE'S HOW!

- Rationing assures everyone a fair share of scarce foods. Without rationing, farmers might get all the butter they need; they might not get sugar. City dwellers might get sugar but no butter.
- Rationing helps to keep prices steady.
- Rationing has assured farmers sufficient ammunition to protect their crops and livestock.
- Rationing makes it possible for farmers to get coupons to feed harvesters and other transient farm workers.



The FARMER helps Rationing HERE'S HOW!

- By collecting and turning in the coupons acquired against the use and sale of butter and the sale of honey and rationed maple products.
- By writing to the Local Ration Boards for application form RB-77 as SOON as they know definitely that transient labour rations will be needed to feed extra help hired for periods of less than two weeks.

Rationing is not intended to add unnecessarily to the burden of Canadian farmers who, faced with shortages of labour, materials and machinery, have continued to respond to repeated calls for greater production.

It is a protection against waste . . . shortages . . . inflation.

THE WARTIME PRICES AND TRADE BOARD

red clover. Its range of flower and seed colour, however, is similar to that found in the majority of commercial stocks.

In a forage crop valued primarily for its leaf and stem, the ability to produce seed is of secondary importance, but this is not to say that seed producing ability in a variety of red clover can afford to be neglected. Satisfactory seed crops must be obtained if local seed requirements are to be met and the seed sold at a reasonable price. There has been no evidence to date that the seed production of the Dollard variety is in any way inferior to that of ordinary commercial red clover, provided that the first cutting is made in good time. The later commencement of flowering in this variety, mentioned above, makes it desirable to cut the first growth earlier than that of ordinary red clover if the aftermath is to be used for seed production. Experience over a period of several years has shown that the most satisfactory seed crops have been obtained when the first cutting is made about the middle of June rather than later. While this may be too early for making satisfactory hay by the usual methods in some sections of the Province, curing the early-cut clover hay on tripods or frames or ensiling the crop may be suitable alternatives. Tripods or frames used to assist the curing of early-cut clover can also be very usefully employed in drying the seed crop later in the season.

Seed Grown at College Farm

The multiplication of seed of this new variety of red clover, and its distribution to seed growers in Quebec, would have been very slow indeed if it had not been for the Provincial Seed Farm at Macdonald College, operated jointly with the Quebec Department of Agriculture. On this farm, seed crops of Dollard red clover have been grown continuously since 1939 with the object of furnishing a supply of pure seed to seed centres in different parts of the Province.

The multiplication and distribution of a new variety of red clover is by no means such a simple procedure as the

increase of a new variety of grain. To realize some of the difficulties and hazards which accompany such an undertaking, one has first to recall that it takes two years to produce a red clover seed crop. It is also to be expected that droughts following seeding or severe winter-killing may at times ruin stands, or at least thin them to such an extent that weed control becomes difficult. As a general rule, sufficient reserve seed of the new variety should be retained to meet its seeding requirements of two years. Another concern of the red clover seed grower who wishes to keep his variety pure is to prevent its contamination by pollen carried by bees from fields of other varieties of red clover. There are two ways of doing this: one is to have the seed field isolated by a distance of about one quarter mile from any other variety, and the other is to have the seed field surrounded by fields growing the same variety, but not necessarily for seed. Usually, the latter is the safer and more practical method but it makes further demands on the supply of pure seed of the variety in order to meet the seeding needs of neighbouring farms.

All of these exacting seed requirements had to be met at the Provincial Seed Farm and drew heavily on the seed produced at the Farm in the earlier years. In 1941, the first distribution of seed was made to a seed centre established in the Chambly - St. Bruno Section of the Province. Here again, the same process of building up a local reserve of seed and providing seed for other fields surrounding the seed fields had to be repeated. As a result of the co-operation of neighbouring farmers in this section with the Quebec Department of Agriculture, the seed centre achieved the production of 17,000 pounds of cleaned seed in 1944. About one-fifth of this supply came from fields with adequate protection from contamination with other red clover and this protected seed was used by all the growers in the centre for their 1945 seeding. The remainder of the 1944 production was held as reserve or marketed through the Co-opérative Fedérée.

With the aid of seed coming from the Provincial Seed Farm each year, it is hoped that this centre will eventually produce seed suitable for sale as Registered Seed and that the purity of the variety in the area will be maintained. Meanwhile, with the aid of this initial seed centre, it should be possible to establish new seed centres in other parts of the Province in the near future.

A CORRECTION

In our editorial comment, last month, we intended to say that ". . . in the Dominion at the present time it is estimated that at least 2,000 veterinarians are required for the adequate protection of animal health".

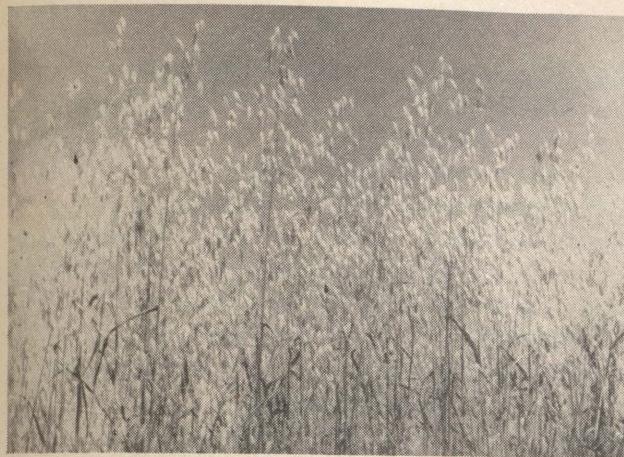
A typographical error which our proof-reader did not spot made the sentence read 200 instead of 2,000, which made the rest of the article pointless. We'll try to see that this doesn't happen again.



Seed crop of Dollard Red Clover on the Provincial Seed Farm.

The Roxton Oat

by E. A. Lods



Roxton has a spreading head and medium to large grain.

The Roxton Oat is a further contribution of the plant breeder to greater crop production, not only for larger yields but also to reduce the dips or losses in some of the poor years. This new variety produces good yields of grain having a low hull content, has a very high degree of resistance to crown or leaf rust under Quebec conditions, and considerable resistance to stem rust.

The Roxton is a product of the Agronomy Department of Macdonald College. The cross from which it originated was made in 1927. For a number of generations the hybrid was grown, was studied, and from it promising plants were selected. Finally from a number of selections tested, one was accepted as satisfactory. Before this new variety could be released and recommended to the public, it had to be tested in comparison with the other varieties already in use, and with other new varieties.

Experiments conducted at Macdonald College only were not considered sufficient. To determine whether or not the variety had a wide adaptation, tests were conducted by the experimental stations, and on outside farms. The very strong evidence of all these tests proved that the Roxton is a superior oat.

Resistance to Disease

There is no doubt that this variety is resistant to leaf rust. In the tests conducted through Quebec and in the Ottawa Valley, it has been more resistant to leaf rust than have the Erban and the Mabel. It cannot be said that this high degree of resistance would be evidenced in all parts of the continent. There are a number of races or "varieties" of leaf rust which, as far as appearance is concerned, are not distinguishable. However, these races differ as to the varieties of oats which they attack. The Roxton is highly resistant to the races usually found in eastern Canada.

The information as to the reaction of this variety to stem rust is limited. Without question it has considerable resistance. However, it is not known if it will be shown to have as much resistance as have the Vanguard and Ajax

in the bad stem rust areas of eastern Canada. In the case of stem rust, also, there are a large number of races. As a result, this variety may be resistant one year, partly resistant another year or in another district, or susceptible under a different set of conditions. However, it is known that the Roxton possesses more resistance to stem rust than do the older common varieties.

The Roxton has considerable resistance to covered smut, but is susceptible to loose smut of oats. The degree of resistance it possesses does not warrant omitting control treatments of seed.

General Description and Performance

The Roxton matures about a day or two later than do the Banner and the Victory. Therefore, its adaptability is limited to areas where the later maturing varieties are satisfactory, both in view of productivity and of management. The straw is longer than that of the Banner. However the straw is not weak. Generally, it can be said that the Roxton has a reasonably strong straw.

The variety has a widely spreading head in which is borne a medium to large grain — long, white, and very seldom bearing an awn. The grain has an attractive appearance. However, it has not the short, heavy appearance of the better samples of western grown oats. A good sample of Roxton will have less hull than a good sample of western oats of ordinary varieties.

In the accompanying table is given a comparison of the production of the Roxton with that of other varieties commonly grown in eastern Canada, as obtained in the experiments conducted at Macdonald College. The yields of grain as from the thresher are given. The differences between the varieties as to the percentage of hull in the grain are shown. Since the amount of kernel produced is the real basis of comparing varieties regarding the production of food, the net yields of kernel are presented.

The results show that, on the basis of a five year average, the Roxton produced more grain than did the other varieties. Due to differences in hull content the yield of kernel of Roxton is markedly above that of the others. The experiments conducted by the experimental stations at the stations, and the tests conducted at other points agree with those obtained at Macdonald College. The whole proves that the Roxton is a really high yielding variety under a wide range of conditions.

General Adaptability

The information given as to the yielding ability of the variety has been obtained in experiments conducted with small plots on a comparative basis. It shows clearly how the varieties compare under conditions of the experiments. However, there is only limited information as to the farmers' reaction to the use of the Roxton when it is grown on a field scale. As to how the variety will be received will depend upon the general adaptability both as to pro-

(Continued on page 15)

The Use of Oats for Bacon Hogs

by E. W. Crampton

The object of hog feeding in Canada is ultimately the production of carcasses suitable for bacon of a type and quality acceptable to Canadian and British trade. From the hog feeder's point of view, the carcass is the goal. Specifications for carcass excellence have been set by Government Agencies and encouragement toward the production of the top grade given in cash bonuses.

The carcass is the result of breeding and of feeding — both of which are in part under the farmer's control. In the former category come such characteristics as length and general skeleton size at a given market weight. Breeding also plays an important role in fleshing tendencies as is evident from the easily observed difference between lard and bacon types of hogs.

But within the limits of heredity, considerable modification can be made in the carcass characteristics by feeding, — especially with respect to the extent of the external fat layer, and probably also in connection with the actual lean tissue development. These effects can be, and are produced, for example by controlling the intake of the vitamin B complex which is directly concerned with fat synthesis. But it seems probable that carcass modification can also be affected by regulating rate of growth through regulation of caloric intake. The question is in part how, and in part when, should fast or slow rates of weight increase be aimed at.

For hogs on unlimited feed, the daily weight gain increases steadily from weaning time to nearly 200 pounds. Perhaps from this it has been assumed that such a trend leads to ideal bacon carcasses. Against this must be considered that during early growth, the natural tendency is for most of the food to be utilized for bone and lean tissue increase. This urge to grow is gradually superceded by a fattening 'cycle'. This is merely the expression of the conversion and deposition as fat of food eaten beyond the now declining needs for further frame and muscle development. Restriction of food, proportional to the decline in need for true growth, would naturally result in a decline in rate of daily gain, and also in a leaner carcass.

Thus it seems logical that maximum daily weight gain at first, and considerably less than maximum daily gain during the latter part of the feeding period will result in a leaner carcass than would be the case when rapid gains were encouraged through the entire feeding period.

How to regulate these rates of gain with pigs fed in groups under practical conditions must be something more than the restriction or offering of feed. Only under full feeding can group-fed hogs each be assured of their proportionate share of the allowance. Under restriction of feed offered, the greedy pigs of the group will still be 'full-fed', while the others will have available less than was intended.

The end result is an ever increasing variability between pigs, in weights and gains which is contrary to good swine husbandry.

Insofar as fattening is concerned, the bulkiness of the feed mixture is an important factor. This is because the degree of bulkiness is almost directly proportional to the amount of crude fibre of the ration; and crude fibre is very poorly digested by pigs. Thus the digestibility of the whole ration declines as the crude fibre increases. It is only the digested part of the feed eaten that can be used by the pig for fattening or any other purpose.

The three chief Canadian grains carry crude fibre as follows:— wheat 4%, barley 6%, and oats 11%. And these feeds stand in this order as fattening feeds.

Usual pig feeding practice calls for the avoidance of heavy oat feeding to fattening pigs. This grain is commonly called a growing feed. When used as the principal grain for bacon hogs, the carcasses from 200 pound pigs have often been found to be leaner than desired — so much so that penalty for underfinish is incurred. Heavy feeding of wheat in the finishing period on the other hand results in faster gains, but unfortunately in over-fat carcasses.

These facts lie behind the suggestion that it may be possible to increase the proportion of bonused carcasses through ration changes during the growing and fattening period — but changes contrary to presently accepted practice. It would seem that the logical program should be to feed the wheat or barley liberally to the pigs during the early part of the growing period when the natural tendency for the pig is to convert its food to lean tissue and bone. Then when the growth 'cycle' is less prominent, a ration higher in fibre such as oats might be employed to allow whatever further growth can be made but to restrict the excessive fattening which would take place were the less fibrous feeds used as in the usual feeding program.

The introduction of the higher fibre ration for the finishing of the pigs is in effect the same as a restriction of feed intake. It is in fact a restriction of the intake of digestible nutrients which is the thing aimed at in restricting total feed consumption.

Already there is evidence of the effectiveness of such regulation of gains with market pigs in terms of the carcass excellence attained. Feeders who have home-grown oats may be interested in trying this feeding plan during the coming winter. The ration, until the pigs weigh 100 pounds, might consist of 85 pounds of barley or mixed barley and wheat, plus 15 pounds of a mixed protein-mineral supplement. For pigs over 100 pounds the ration should consist of 10 pounds of the mixed supplement plus 90 pounds of oats or mixed farm grains, largely oats.

Poultry Notes

by W. A. Maw

Does the type of nest used influence the number of soiled eggs collected?

Generally speaking, nests are constructed to be single or multiple units and light or dark. Single units are used for trap-nest record work and as dark multiple units with a rear entrance and enclosed front. A similar setup is used with the so-called community nest, which is trough-like, accommodating several individuals and may have one entrance only or two with an entrance at each end. The front of such nests is arranged as a door on hinges for gathering the eggs. Nests with one opening only prevent soiled eggs to a greater extent, as the birds are forced to travel over more litter in the nest before settling down to lay.

Should grit and shell material be fed to young stock on range?

Insoluble grit should be provided for all stock, young and old, and certainly to growing stock where large quantities of forage are being eaten. The grit assists in grinding the food in the gizzard, thus avoiding gizzard impaction caused by dry forage, especially grasses.

Shell material provides lime or calcium for bone and egg shell structure. It is advisable to provide shell in the field hoppers, either in separate compartments or in the mash section.

What factors influence fattening results?

Individual birds vary in their ability to produce plump fleshing and a good distribution of fat over the entire body. Well-proportioned bodies are necessary for good feeding results. Such birds are usually more vigorous as well and therefore respond to confinement feeding and management. The length of feeding periods will vary from 7 to 14 days, depending upon the age and condition of the individuals. Higher protein feeds are usually fed to younger stock and three feeds per day give slightly better results than two feeds.

How can a simple fattening coop be constructed?

Fattening results are usually best where the birds are confined to pens or crates. A simple coop which has the advantage of battery or crate confinement, as well as accommodating a larger number of individuals per unit, can be made as follows: solid walls on ends and back, although the top back board is hinged for ventilation; the roof is portable, being held by hooks, and has an overhang in front and rear for shade; the front is slatted or covered by 2x4 square wire cloth with an opening for feeding 2 inches wide. The size is 36 inches wide by 60 inches long and 30 inches high in front and 24 inches high in the rear, giving a sloping roof. The floor may be slatted by $\frac{3}{4}$ inch by $1\frac{1}{2}$ inch slats running from front to rear with one inch opening between slats. The door is on the frontwall (preferably sliding) and a V-trough is

set on brackets across the front for feeding and watering.

How can fall cockerel mortality be reduced?

Outdoor roosts save cockerels.

Growing cockerels, especially Leghorns, when over 16 weeks of age begin to drive one another to the extent that a number may be killed. Protection is needed by way of being able to get off the ground when chased. A simple arrangement is to build a V-shaped rack with two or three cross roosts, so that the birds being chased may take refuge on such roosts. Place such racks in a shaded area close to range shelter where possible.

Does hatchability of eggs vary with the seasons of the year?

Ordinarily the hatching season is only during the late winter and spring period, but latterly summer and fall hatching has been carried on. The fall season with pullet breeders is usually the poorest and the spring period the best; the summer season being somewhat poorer than the spring but about the same as the winter period. The differences noted may be in part due to the age and condition of the males used. Young males starting in the fall apparently do not give as good results as when mature (10 to 12 months old) and again after a full spring season's mating the hatchability drops. Fertility is usually lowest during the winter season. The problem appears to be one of strong germs to hatch well. Where well fed for breeding and sufficient males are used, at least seven per one hundred females, it may be advisable to have a second group of younger males to replace the older ones in the late spring for the summer and fall period. Fall hatched males may be worth considering for summer breeding.

Egg Market Assured

The Canadian poultry industry has an assured egg market for the next two and one-half years in Great Britain. Eggs have proved to be an invaluable food in the diet of all peoples. Fresh eggs have a particular value for our flying forces according to Mr. J. Peacock of the British Ministry of Foods, who was the guest of the Quebec Poultry Industry Committee on Monday, July 23rd, in Montreal. Eggs are and will be in as great need during the next few years, as they have been during the European War years. Britain is sharing her food stocks to feed the freed peoples of Europe. New and greater uses of eggs are also being developed.

The poultry industry must continue to develop greater efficiency in order to keep costs at a minimum and to be in a position to meet world competition in the near future.

Poultry meats are also in increasing demand. All efforts must therefore be put forth to produce and maintain maximum quality in all stock marketed.



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

Co-operation in Agriculture

According to the last Report of the Minister of Agriculture, about six million chicks were produced during 1943 in the 46 Quebec co-operative hatcheries, the capacity of which totaled over two million eggs with a hatching percentage of 67.

During the same year, 10 new co-operative hatcheries were set up with a total capacity of about half a million eggs, the most important of which are at Chicoutimi, Nicolet, Granby and Iberville; in each of these centres, the incubating capacity is 65,000 eggs. In ten of the existing hatcheries, the capacity was increased by about 300,000 eggs; Vaudreuil comes first with an increase of 65,000 eggs.

Co-operative hatcheries in Quebec now total 56, with a 2.8 million egg capacity. A more accurate picture of the total chick production in this Province could be obtained by adding the 49 private hatcheries in which over 1.2 million certified chicks were hatched in 1944. With the 6 million put on the market by the co-operative hatcheries, the total production in Quebec now reaches 7.2 million chicks.

The organization of co-operative hatcheries started in 1931. Since then, out of the 43 million eggs incubated about 28 million chicks were produced. This is one of the outstanding features of the co-operative movement at a time when consumers and the whole world need, more than ever before, a larger output of eggs and fowl meat. In this respect, we are better prepared than ever to meet the post-war requirements and competition.

Know Your Facts About Co-operation

A series of 12 studies in Co-operation, in an attractively printed leaflet form, is now available in the Macdonald College Study Outlines. Each leaflet deals with a single topic, suitable for an evening's work in a study group. Stimulating questions and illuminating illustrations and graphs are included. The twelve leaflets provide a well-balanced booklet for private reading and reference. The topics include:

The purposes, principles and possibilities of co-operation; the essentials to co-operative success; the function and organization of credit unions, consumers' and producers' co-operatives; problems of management; the place of education in co-operation and a brief treatment of co-operative medicine.

Single sets \$0.60, in orders of 50 or more \$0.50. Write to the Journal Office, Macdonald College, Que.

Market Comments

Fine weather of the past few weeks has improved crop conditions. The late wet seeding prevented some areas from being sown at all and made some crops late, yet recent favourable weather has improved prospects. Hay and pasture crops are good in Eastern Canada. Fall wheat in Ontario is reported as a heavy crop.

Crops in Western Canada are late and variable. Some sections have had plentiful moisture while others are dry. Cold weather has retarded growth and prospects now are for a much smaller crop than last year though there is still chance of a crop much above average.

The apple crop has been so far the greatest sufferer especially in the East. A recent Annapolis Valley report estimates the crop at less than quarter of that of last year.

It is fortunate that Canada had a good run of seasons throughout the period of the war in Europe. This will go down in history as the first large war which lasted several years and yet found food — at least that variety that Canada produces — plentiful and cheap.

Now that the war in Europe is over Canadian farmers can well afford to take things easier and not try to monopolize work by trying to put in two forty hour weeks per week.

Trend of Prices

	July 1944	June 1945	July 1945
LIVE STOCK:			
Steers, good, per cwt.	\$12.62	\$13.30	\$12.65
Cows, good, per cwt.	9.19	10.25	9.50
Cows, common, per cwt.	7.20	7.68	7.40
Canners and Cutters, per cwt.	5.20	6.13	5.95
Veal, good and choice, per cwt.	14.13	15.00	14.60
Veal, common, per cwt.	9.53	11.15	10.35
Lambs, good, per cwt.	13.47	15.75	14.50
Lambs, common, per cwt.	11.17	11.70	10.00
Bacon hogs, B. 1, dressed, per cwt.	17.25	20.35	20.20
ANIMAL PRODUCTS:			
Butter, per lb.	0.34	0.34	0.35
Cheese, per lb.	0.21	0.22	0.22
Eggs, Grade A, large, per doz.	0.37	0.35	0.39
Chicken, live 5 lbs. plus per lb.	0.25½	0.30½	0.31
Chicken, dressed, milk fed A. per lb.	0.36¾	0.37	0.37½
FRUITS AND VEGETABLES:			
Apples			
Potatoes, Quebec No. 1, per 75 lb. bag	1.25-1.50	2.15	2.65-2.75
FEED:			
Bran, per ton	29.00	29.00	29.00

P. E. Island Credit Union League Meets

Delegates of Prince Edward Island's Credit unions met in Charlottetown July 3 for their 8th League Convention. The Island province has been for some time one of the best covered areas in the Dominion as far as credit unions were concerned. Nevertheless, three new societies have been formed in the past year.

Every active credit union in the province belongs to the League, it was reported by managing-director Dr. J. T. Croteau, in the review of the year's business given to the

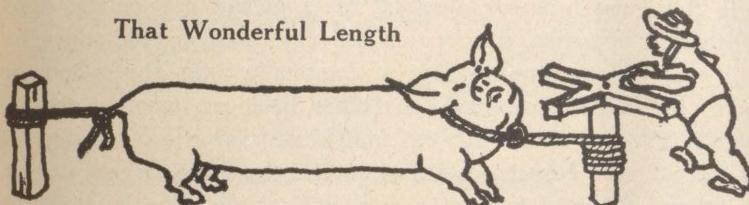
convention. A new League headquarters has been opened in Charlottetown.

As for the individual societies Dr. Croteau referred to their growth as follows:

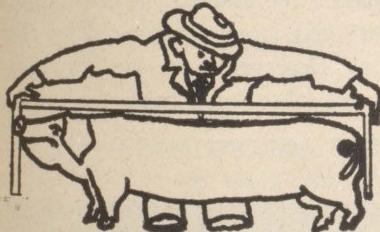
"The credit unions during the past year had a growth and assets greater than that of the first six years of existence. Membership has grown, the organization of the new credit unions has continued, new spirit has been infused in a number of "slow" credit unions, and best of all, the credit unions of the province have continued to show the highest spirit of co-operation in their support of the policies and aims of the League."

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That Wonderful Length



The Extraordinary Uniformity

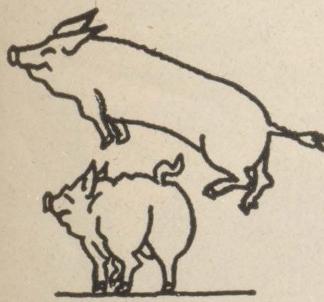


Those Light Shoulders



**All the Pigs in Denmark
Are White**

**Plenty of Exercise
Makes Them Lean**



Those Full Hams



**The Delicate Flavor
Is From Feeding
On Milk
And Barley**





DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Quebec Agronomes Study Rural Problems

Three hundred Professional Agriculturists of Quebec gathered in Three Rivers to study problems of rural population and land tenure. The occasion was the Fourth Annual Meeting of the Corporation des Agronomes de la Province de Quebec (Quebec Corporation of Professional Agriculturists). Under the chairmanship of the retiring President, Mr. William Houde, of the Canadian Industries Limited, the Association studied rural problems.

A paper prepared by Dr. Roger Picard, formerly Professor in the University of Paris, and latterly Professor at the French University in New York, was read. In this paper, Professor Picard, who could not be present because of illness, presented a review of world systems of land tenure and their relation to the comparative prosperity of farming populations. In general, his conclusions were that tenancy has not been satisfactory. The outstanding exception is found in the British Isles where from conditions where the farm worker was tied to the land, there has evolved a tenant system offering permanency to the tenant through long time leases, leases which in cases have been held by the same families for over two centuries.

The Reverend Father Belanger (Dominican), Professor in the Department of Social Sciences of Laval University, discussed moral and social factors influencing permanency in rural population. Father Belanger showed that rural

life offered certain advantages for religious, social and home life and emphasized the value of these to the country. In contra he presented the inadequacies in farm life—often low financial returns, lack of frequent social contacts, lack of some amusements easily obtained in towns and cities, and too often a serious lack of conveniences both in the home and for work. These conditions favoured a movement to urban centres by a part of the progressive rural population which otherwise might stay on the farm.

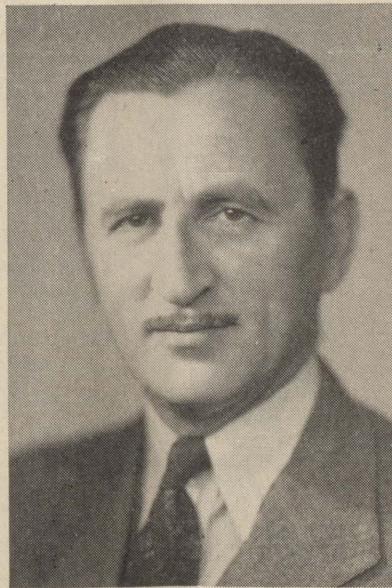
As a help to alleviate this condition, Father Belanger put forward an appeal for a greater development of co-operation, co-operation not only in buying and selling, but in the improvement of community life. The co-operation needed, according to Father Belanger, involved not only co-operation between individuals within a community, but also between communities and the Provincial government, the total to give to rural life some of the advantages not otherwise obtained where there is not a concentration of population.

Mr. René Monetté, Secretary of the Corporation, discussed the evolution of land tenure and change in the rural population in Quebec. He pointed out that during the last century, agriculture was largely influenced by climate and physical conditions. However, since the beginning of this century, capital and labor have been the important

THE NEW OFFICERS OF THE QUEBEC CORPORATION DES AGRONOMES



Prof. E. A. Lods, President;



Dr. George Gauthier, 1st Vice-Pres.;



Nolasque April, 2nd Vice-Pres.

factors with the influence of markets steadily increasing.

During the past seventy years, more than ninety percent of the Quebec farms have been operated by proprietors, notwithstanding the fact that a fairly large proportion of these farms was not under an efficient system of management. There has been no marked change in the proportion of owner operated farms during the period of more rapid modernization. It should be noted, however, that in 1941, more than one-third of the Quebec farms were mortgaged.

Mr. Monetté pointed out the fact that about 1921, the urban population surpassed the rural population and that since, there has been a continued tendency toward urbanization, to the point considered as economically dangerous by some.

The convention also studied the activities and growth of the Association. Consideration was given to reports of various standing committees. The activities of the Corporation in relation to group insurance, the professional standing and security of the membership, the development of the official organ Agriculture, and the greater

coordination of research, teaching and extension, were all given attention.

Much of the success of the convention was due to the excellent organization by the Three Rivers Chapter of the Corporation. Without the help and hospitality presented by the City of Three Rivers, by a number of firms in the district, and by L'Academie de La Salle, the convention would not have been the success it was.

The program for the ladies was excellent. One hundred ladies enjoyed visits to a number of points of interest in the districts, were entertained at tea, and spent one afternoon studying and seeing a demonstration on the subject of French literature for juveniles.

At the dinner, the Corporation was addressed by the Mayor of Three Rivers, the Rector of the College of Nicolet, retiring President of the organization, and by the Hon. Mr. Barre, Minister of Agriculture.

The new officers elected were Prof. E. A. Lods, Macdonald College, as President; Dr. Gauthier, of the Department of Agriculture, as First Vice-President; and Mr. N. April, Director of the Agricultural School at Ste-Martine as Second Vice-President.

Head of New Soils Division Appointed

A Division of Soils has been added to the Québec Department of Agriculture. Professor Auguste Scott will head the new administrative and technical unit. He holds the degrees of B.Sc.Agr. from Laval and M.Sc. from Toronto.

For many years Professor Scott has been in charge of the Department of Soils at the Agricultural School, Ste-Anne-de-la-Pocatière. He won the T. Eaton & Co. scholarship in 1928-29 and specialized in soil chemistry at Toronto University. He was responsible for important soil surveys and was for a few years a judge of the Agricultural Merit Competition.

The Division of Soils is part of the Field Husbandry Branch under André Auger. It will be made of two sections: soil classification and soil analysis (with the provincial laboratory at Ste-Anne). E. Thériault, head of the laboratory, will serve as immediate adviser to Prof. Scott.

25,000 Acres of Flax in Quebec

According to a statement issued by the Deputy Minister of Agriculture, Jules Simard, Quebec remains the principal producer of flax fibre in Canada. Due to the adverse weather conditions in the spring of this year, there are 5,000 to 6,000 acres less under cultivation; but, in spite of this fact, Quebec still tops all other provinces in the area seeded to fibre flax. Flax is grown mainly in the six following districts: Vaudreuil-Soulanges, Châteauguay-Beauharnois, Maskinongé-St-Maurice, Eastern Townships, Lower Québec, St-Hyacinthe-St-Jean.

All fields will be visited by provincial and federal inspectors during the course of the summer. Six groups of provincial inspectors will start their work this week. They are seeking dodder, a parasite plant, and will apply control methods wherever it is found. The inspection will last six weeks and will end around August 20. Rosario Barabé, Chief of the Noxious Weeds Section, is in charge of the campaign. Groups are being directed in the field by R. Cartier.

It is interesting to note that areas contaminated by dodder in 1940 have been reduced by 76.7% in 1944. An appreciable reduction is again foreseen for the current year.

Contests between Butter and Cheese Factories

\$1,000 in Prizes

The Quebec Department of Agriculture, in collaboration with the St. Hyacinthe Dairy School, has just opened a contest between butter and cheese factories. The Minister, Hon. Laurent Barré has issued a circular containing the rulings of the contest and he also announced that \$1,000 will be offered in prizes at the end of the 1945 season. This amount will be distributed between the ten best cheese and butter makers. The total amount to be divided between each group will be \$500. Mr. Barré reminds Press representatives that the object of this contest is "to maintain the quality of the Quebec dairy products so as to assure better returns to farmers by retaining their markets".

A special committee made up of three judges will render the final decision on the winners over the ten makers chosen in both sections of the contest.

Zebra Caterpillar Threatens Hoed Crops

The insect known as the Zebra Caterpillar threatens several hoed crops again this year. In 1944, the Department of Agriculture issued warnings to all farmers regarding this devastating insect which caused great havoc to certain crops.

Dr. Georges Gauthier, Chief of the Plant Protection Bureau, stresses the importance of destroying this caterpillar at the very outset of its appearance and gives the following instructions for so doing:

"Zebra caterpillars feed on the leaves of cabbage, turnip and cauliflower. When numerous, they cause serious damage in a short time. It is black and yellow and sometimes attains two inches in length. On the back and sides it has two longitudinal yellow stripes. There are two generations per year. The first appears around the end of June and at the beginning of July; the second, which is always the most destructive, appears around the middle of August and the beginning of September.

This caterpillar may be destroyed by using one part Paris Green with two parts hydrated lime. Arsenate of lime or lead mixed with 5 or 6 parts of hydrated lime is also recommendable. One of these mixtures is sifted or dusted onto the plants in the morning or evening while they are still wet with dew.

Plants may also be sprayed with arsenate by using two pounds per 40 gallons of water. Add 2 to 3 pounds of laundry soap to this solution so that it will adhere to the waxy leaves of turnips, cabbages and beets.

Whatever means are employed it is important to apply same just as soon as the caterpillars appear on the foliage. Constant watch must be maintained and immediate action taken.

Quebec Dairy Industry Making Progress

The production of creamery butter in Quebec for the year 1943 has increased by 17% over 1942 whereas the production of creamery cheese has declined by 22.5% below the preceding year, according to the last Report of the Minister of Agriculture. The output of condensed dairy products, of casein and ice cream for the same year has been respectively higher by 5%, 15.4% and 12.6% while a considerable gain in the consumption of fluid milk has been registered. The upward trend in the prices of butter, cheese and all dairy products, the high purchasing power of the consumer and the demand almost unlimited on the part of the export trade are mainly responsible for this jump in the dairy output on our farms. The premiums and bonuses of both the federal and provincial governments have been an incentive to balance the supply of various dairy products according to the needs of the moment.

The dairy industry in Quebec, it is pointed out in the same Report, differs from that of Ontario by two important points. Most of the combined factories are located in Quebec, with the result that the respective production of butter and cheese is more flexible in this province; by way of compensation, 70% of the condensed milk factories are found in Ontario with the result that the manufacturing of dairy products in this sister-province is spread on a broader scale than in Quebec. However, the efforts of Quebec's Dairy specialists are directed toward a greater diversification of dairy products and by-products in order that farmers may take advantage of all commercial outlets.

A slight increase is shown in the quality of both butter and cheese for the year 1943; 94.5% of our butter and 93.75% of our cheese have graded No. 1, a gain of 1.23% in the first case and 2.90% in the second, over 1942.

Agricultural Exposition in Vercheres County

The Agricultural Society of the county of Verchères always held its agricultural and industrial expositions on its grounds at Ste-Theodosie. However, in view of this place being relatively isolated and of the distinct and multiple advantages to be gained on the old J.K.L. Ross farm located close to the Village of Verchères, this society has just acquired from Mr. Bernard Pigeon, a frontage of 3 arpents of land by 7 arpents deep, on the St. Lambert-Levis national highway where all annual exhibitions will be held from 1946 on. This year's Exposition will be held as usual at Ste. Theodosie on September 11. Visitors are reminded that there are always superb animals to be seen in the Belgian and Percheron horse classes as well as in the Holstein and Ayrshire cattle class, etc.

The 1945 Jury of Agricultural Merit

The appointment of judges for the 1945 Agricultural Merit Contest are: Dr. Maurice St-Pierre, Professor at the Agricultural School of Ste-Anne de la Pocatière; L. Philippe Laberge, Commander of the Agricultural Order of Merit and last year's Gold Medallist; J.-A. Foley, farmer of St-Thuribe, Portneuf; W. L. Carr, Huntingdon farmer, and Pellerin Lagloire, Agronomist, who will act both as Judge and Secretary for the Commission.

The 1945 contest will be held in district No. 1, taking in both islands of Montreal and Jesus, as well as the neighbouring counties on both shores of the St. Lawrence. Farm appraisals will start within a few days. Winners shall be proclaimed at the Agricultural Merit festival during the Quebec Provincial Exposition.

A patient in an asylum was observed winding up and making imaginary pitches, although he didn't have a baseball in his hand. An inquiring visitor was told that the man was a farmer and bad times had unsettled his mind.

Said the visitor, "I'm a farmer too, and if I don't get a good crop this year I'll be in there catching for that chap."

ROXTON . . . (*Continued from page 7*)

ductivity and ease of handling under farm conditions. The reports received up to now are very favourable. The writer has observed this variety in many experiments over a number of years, as well as in larger areas where grown for seed production, and feels that the Roxton is really good for use as a farm crop.

For the district of Montreal and a large part of the Ottawa Valley, the variety should prove most useful. Though it matures as late as does the Banner, a hot, dry season does not seem to reduce the quality of grain of the Roxton to the extent that the same conditions adversely affect the Banner. It appears that through the east where the later maturing varieties are suitable either as regards productivity or management, the Roxton can be recommended. Naturally, there may be areas with special local conditions for which this general recommendation will not apply.

Without doubt the Roxton is an improvement over many of the oats varieties now used. It has productivity, quality of grain, disease resistance, and a wide adaptability. Though no claim is made that it is perfect, it is claimed that it is definitely a step forward in crop improvement. Still better varieties will be produced. At present it is one of the very best. However, neither the Roxton nor any variety will give good yields under poor conditions. The use of superior varieties is an important factor in obtaining good crops, but good crops cannot be obtained without the use of good seed, of early seeding, and of good soil management. The use of food varieties is not more important than is a good environment.

Comparison of Roxton with Other Recommended Varieties — Five Year Averages

	No. of Days to Mature	Yields of Grain Per Acre Bushels	Percentage of Hull	Yields of Kernel-Pounds
Roxton	88	75.8	22.8	1992
Banner 44 M.C.	87	68.2	29.4	1641
Vanguard	85	69.5	27.1	1723
Erban	83	66.9	27.2	1652
Ajax	79	69.9	30.3	1657
Mabel	78	65.8	23.6	1709

Milk Takes Place of Soft Drinks

"It's an ill wind that blows nobody any good". This is true in respect to the reduction in quantities of soft drinks caused by the shortage of sugar. This means a loss to the manufacturers of these beverages. But what is their loss is in part a gain for dairy farmers as it turns out that restaurants are now purchasing fluid milk and are offering the public milk drinks as a substitute for the missing soft drinks. Since the price for fluid milk is higher proportionately than for butter fat, the farmers who produce this extra milk, are correspondingly better paid for their product. Moreover, few will disagree that the customer is getting a substitute that has a value that is not equalled by any other beverage on the market.

Notwithstanding the greater increased sales of fluid milk which have taken place since the war began and which are now being added to because of the substitution of milk for some of the soft drinks, butter fat production in the creameries of Nova Scotia continues well above production for the corresponding period of a year ago. For the week ended July 7 the creamery production was 5% above that of the corresponding week of 1944, and the production to date for the whole year is about 10% above that of a year ago.

Now More Profit In Raising Hogs

When does it pay to raise hogs? Most farmers figure they can make a profit on hogs when the selling price is well above the cost of feed eaten by the hog. In this calculation they are right: feed is the biggest part of the cost of raising hogs. But as neither the cost of feed nor the price of hogs stays steady for long, there are times when hog raising is more profitable than others, and now is that time.

Economists say that this is proved by the present hog-barley ratio, which is explained by Keith Leckie, a Dominion Department of Agriculture economist who was born and brought up on a western Ontario farm which has always kept hogs, and has had more brood sows during the war than ever before, and several more this year than last. In the "Economic Annalist", he describes the way he finds out when hog raising is profitable, under what he calls the Hog Feed Margin.

He figures that it takes about 14 bushels of barley to produce one hundred pounds of pork. So he multiplies by 14 the price of barley and subtracts this from the price paid per hundredweight for a B1 hog. The difference between these figures is the margin a farmer makes on selling barley as pork rather than as grain. And in his figuring, he takes into account the advance equalization payment made by the Dominion Government to Western Canada barley growers and also the Dominion premium on quality hogs.

This calculation shows that for every hundredweight of pork a farmer produces he has a margin of \$8.32 above the cost of the barley it took to produce that hundredweight of pork. Of course, that \$8.32 is not all clear profit. Allowance must be made for labour and other expenses such as housing. But the point is that the margin of \$8.32 a hundred — which is the present figure at Winnipeg — is now higher than it has been at any time since war began.

Now this margin of \$8.32 may not hold all year. But to find a whole year when the Hog-Feed Margin averaged higher than at present, one has to go back to 1930.

Labour costs are higher than they used to be. And so is the cost of building a new pig pen. But these are not big items in the cost of raising hogs. The biggest cost is feed, and there is more margin in feeding grain to hogs now than there has been in 15 years.

Strippings

by Gordon W. Geddes

A few weeks ago Mr. and Mrs. Freeman Sutton invited us to come with them in an attempt to track the Showy Lady's Slipper to its lair. They had tried several times, but, lo and behold, this time we found it. Success was not due in any way to the fact that Dot and I were along because we only followed where they led. However, the 'Showy Lady' was certainly worth seeing, even if it was muddy going. It would be a wonderful place to establish a sanctuary for them along the lines of the Trillium sanctuary started by the Steckles at Williamsburg, Ont. We violated the rules of such a safety zone by taking out one precious plant because we had a similar swamp and hoped we might get it to grow and multiply.

A few days ago we made another find in flowers which we identified as Pipsissewa, a member of the Heath family and a relative of the Trailing Arbutus. The waxy pink and white flowers have the same colours as the Lady's Slipper but are quite tiny. We found the plants some time ago and knew that they blossomed but always looked too early for the flowers.

And now for another type of flower, the blossom on the timothy. It was five days later showing this year than last, when it first appeared June 30th. That day we started to fill the silo while we commenced on July 5th this year with the first bloom just showing. We got off to a bad start with a breakdown on the hayloader the first round of the field. After that things went along well enough. But the hay was heavier for I think we put in a bit more stuff from a slightly smaller acreage. The first day we tried adding some barley meal to replace molasses as a preservative. It may make good ensilage but it makes a bad place for the men in the silo. I don't know how it is usually added but we put it on dry in the silo. The wind from the blower just created a dust-storm and it was three days before I got the barley meal out of my eyes.

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The second day we were short of help and had to get young Billie Hudson up from the village to get his first taste of that sort of thing. We told him that treading the silage was an important part and he certainly did it. It made my legs ache just to watch his going. Last year Stanley was with me but this year he graduated to helping pitch into the cutter.

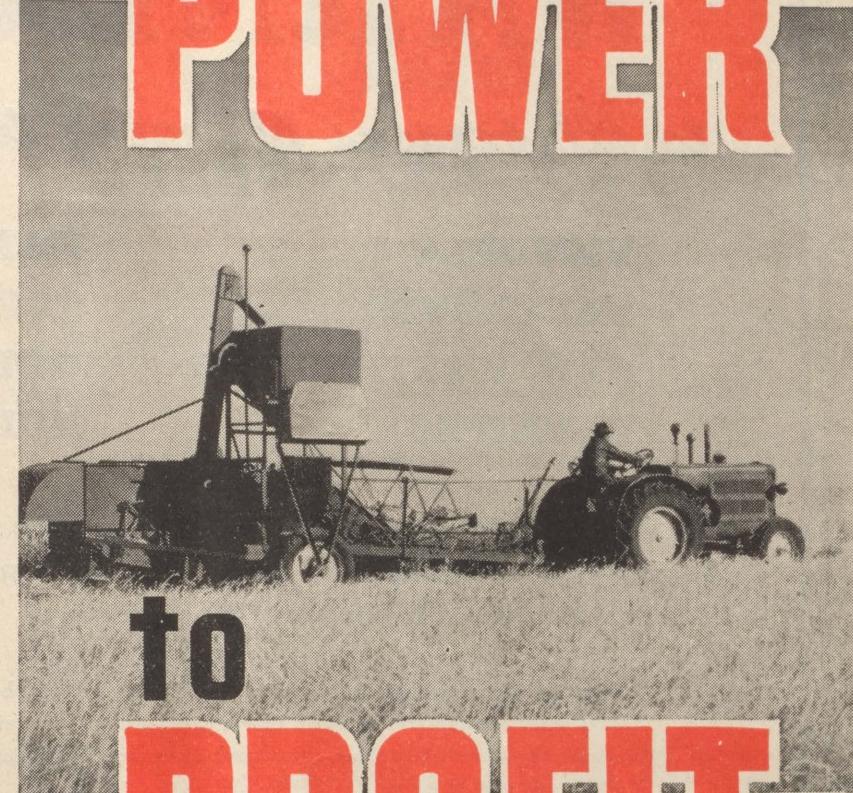
Last year's experience convinced us that wilting the material in the field is risky business after it blossoms so this year we tried not to let it stand and it seemed to pack better. J. A. Ste. Marie told us a little later that they found it the same at the Lennoxville Experimental Farm. Last year they filled three silos using molasses and one without. Contrary to expectations the latter turned out the best. This was because they were more careful to put in green material since they had no preservative to give a margin of safety.

We also tried a little different method of getting a seal on top. Some wet straw was cut in, the same as last year, then Stan and I hauled up some sawdust with pulleys and added to it. Next we pulled up about 75 pails of water to make it good and heavy. Stan thought that was a good job though he had to dodge occasionally to avoid a cold shower. It certainly made the top pack down tightly and it seems to stay hard. Finally we sowed oats thickly over the top. To date we like results but we can't tell until it is opened up.

Potatoes are again proving that we don't properly appreciate a thing until we haven't got it. We took the spuds for granted like the air we breathe. Anyway we still have a few to see us through to the new crop which seems to be coming along well on its straight fertilizer diet as are the turnips. Even the apples look now as if they might fill a few jars for next winter.

The late pig of the litter went to market yesterday. He objected to going into the box so Stan and I gave him the old swill-pail treatment. It worked and he went in backwards all ready to come right out. I read the other day that farmers should cast a sorrowful glance at the present \$20 price for hogs since that price meant that they were going on the home market instead of building a post-war trade with Britain. If so, it

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WARNING!

to all persons planning to move to

VICTORIA

VANCOUVER

NEW WESTMINSTER

WINNIPEG

HAMILTON

TORONTO

OTTAWA

HULL

No person may move to and rent or occupy family quarters in any of these congested areas without a permit from the Administrator of Emergency Shelter.

Before making arrangements to vacate your present home, be sure that you have other accommodation and a permit to occupy it. Applications for permits should be addressed to the Administrator of Emergency Shelter in the area to which you plan to move.

Every person who rents or occupies family quarters in any of these districts contrary to the order, commits an offence and, in addition to other penalties, will be required to vacate the shelter and the district at his own expense.

(Issued under the authority of the Emergency Shelter Regulations, Order-in-Council P.C. 9439, December 19, 1944).

THE WARTIME PRICES AND TRADE BOARD

ES-6N

is certainly something to think about though the recent rise in barley meal would make it painful to have hog prices eased and will also decrease the number of hogs produced.

Warble Fly Control

A practical example of warble fly control comes from British Columbia, as reported by the Division of Illustration Stations, Dominion Experimental Farms Service, Mr. Pryce, the

farmer operator of the Wawota Illustration Station, and five other farmers purchased a power sprayer and have treated all their cattle for warble fly control for this year (1945). They also treated the cattle on all the farms in their immediate district, with the exception of those owned by two farmers who did not wish the work done. The complete control of warble flies in any area is possible only when all cattle in a community are treated.

Seed of black mustard is now sown

by aeroplane over burned-out areas in mountainous regions as an immediate means of preventing the soil erosion that would otherwise result.

A new lacquer for coating cans is made largely from milk.

A suggestion has been made to produce commercial fish farms by sealing off areas of salt-water and then adding fertiliser to promote growth of "plankton", the microscopic plants that are the original source of fish-food.

Buying Milk in Bricks

Research workers at Pennsylvania State College come out with the interesting statement that perhaps in the future we'll be able to buy concentrated frozen milks in bricks similar to the ice cream bricks we buy at the present time.

The experts at the Pennsylvania College say that the frozen concentrated milk, when thawed and properly diluted with water, can hardly be distinguished from fresh milk.

I don't know how they make the frozen brick of concentrated milk in the first place. But provided you could get one, here's what you'd do. You'd merely place the brick into hot water, and presto, there's your milk.

If you used an equal amount of water, the result would be a product resembling coffee cream. If you want milk, just double the amount of water.

Sounds simple, doesn't it?

The United States armed forces are interested in the frozen concentrated milk. They view it as a possible source of fluid milk on hospital ships.

What will they think of next!

Farm Women's Co-operative

The thought of home-cooked farm food causes the mouths of city people to water. Home-made baked beans, apple pies, chickens, fresh vegetables, sausage meat, preserves . . . well!

The women of Montgomery County, Maryland, in the United States, have been running a successful co-operative business to sell just these, and other things. When they started 13 years ago their income was \$5,000 a year. Now they have a \$275,000 a year business, and it is still growing. The women have their market at Bethesda, which is about a mile north of the District of Columbia line. The market attracts shoppers from Washington and suburbs, all eager to buy the delicious home-cooked food.

The farm ladies recently made the final payment on a \$50,000 mortgage, and they have used their own profits

Now Available

Farm Improvement Loans

Loans to farmers up to \$3,000 are now available at any branch of The Royal Bank of Canada, under the new Farm Improvement Loans Act.

- 1. FOR THE PURCHASE OF FOUNDATION OR BREEDING LIVESTOCK**, on the security of the livestock.
- 2. FOR THE PURCHASE OF FARM IMPLEMENTS**, on the security of the farm implements.
- 3. FOR THE PURCHASE OF FARM EQUIPMENT**, on the security of the equipment.
- 4. FOR THE PURCHASE AND INSTALLATION OF A FARM ELECTRIC SYSTEM**, on the security of the farm electric system.
- 5. FOR THE CONSTRUCTION OF DRAINAGE SYSTEMS** and other improvements or developments, on the security of implements.
- 6. FOR THE CONSTRUCTION, REPAIR, EXTENSION OR IMPROVEMENT OF BUILDINGS ON THE FARM**, on the security of farm implements.

Interest rate—5% simple interest

REPAY by convenient instalments over one or more years, depending on the size of the loan and its purpose.

For further particulars consult the Manager of any branch.

THE ROYAL BANK OF CANADA

to install new kitchen equipment, get their children educated, and any number of other things.

The women take pride in maintaining a high standard in the products they sell, and all recipes are inspected, and any changes must be approved.

They started their project in a vacant store on the main street of Bethesda, and now they have their own beautiful building.

Preventive medicine has lowered the war-time army death rate from disease to a figure lower than in the last 10 years of peace.

Nitrogen fertilizer has been applied to apple trees in a foliage spray to supplement the usual soil-feeding practice.

Jam may be packed in paper containers if sufficient pectin is added.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Federated Institutes Meet at Victoria

by A. F. Smallman

The F. W. I. C. Board met in Victoria, B.C., from June 4-8. For many of us, it meant travelling over vast sections of Canada. More time was spent on trains and planes than in the Board sessions. But each province must have considered the meeting a necessary one for over twenty delegates appeared from all the Provincial Boards. Quebec had four representatives: Mrs. C. E. Dow, National President, Mrs. G. F. W. Kuhring, Corresponding-Secretary, Mrs. C. E. Petch and Mrs. W. C. Smallman. A superintendent attended from each of the two provinces of Nova Scotia and British Columbia. And the Department of Agriculture at Quebec sent a representative from the Cercles des Fermières. The meetings were held in the Empress Hotel and were marked by strict attendance to business. These women had not come to play but to discuss ways to work for "Home and Country."

The foremost decision, resulting from the business sessions, was that, in the future, the F.W.I.C. Board would carry out their intended purpose of acting as a clearing-house for the activities of the Provincial Boards. To further this, the Sub-Executive was chosen as a Policy Committee which would, from time to time, make suggestions as to "national aims" to be pursued. At the final session, it was decided for the coming year to: 1. seek to enlist the interest of younger women in our organization; 2. place the Treasury on a sound financial basis; 3. receive an outline from each province of their post-war plans; 4. retain the F. W. I. C. publication, *The Federated News*, in its present form and 5. group the work of convenorships under two departments, Home Economics and Citizenship.

Only one resolution was endorsed but it is to receive the whole-hearted support of the members and so, should be an expression of their opinion. The resolution referred to the naturalization of citizens—urging that the applicant be able to speak, read and write English or French in an adequate manner, that specified times be set each year for the granting of citizenship and that the youth of Canada, on the attainment of majority, be included in the ceremony of granting citizenship.

Miss Helen MacDougall, Superintendent of Nova Scotia's W. I. gave an excellent talk on our aims. She said that "learning is our motive" and that we should adopt a program attractive to younger members. "What the organization needs is to develop leadership and to further the study of Home Economics."

The speakers at the several sessions showed us, clearly and forcefully, the need in rural areas of libraries, recreational and physical education, social welfare, improved living conditions, "the amenities of life."

Two artistic and beautiful displays of handicrafts were arranged for our pleasure. One was sent by the School of Handicrafts, Department of Agriculture, Quebec. The other was the work done by W. I. members at Craig Flower, B.C. Then, too, we were shown the gift which was brought by Miss Christmas from the W. I. members of England, Wales and Scotland. It consists of handwork and two books which were sent as a token of appreciation of the gifts which Canadian members have sent through the war years. This display is to be mounted by Manitoba

(Concluded on next page)

Ormstown W.I. Holds Annual Picnic

The July meeting of the Ormstown Institute took the form of a picnic. This was held at the summer home of Mrs. Grant McLaren near Port Lewis on Lake St. Francis.

Conveyed by a school bus and cars the members arrived at noon when a delicious buffet luncheon was enjoyed.

The regular meeting was held in the afternoon. An appropriate roll-call had a good response, "What I like to find in a lunch box." The convenor of Home Economics gave a paper on the "Removal of Berry Stains," and Mrs. Geo. Murphy and Mrs. Robt. Rogers, delegates to the Q.W.I. convention, reported fully.

Sympathy was extended to the secretary, Mrs. Warren Sadler in her recent bereavement.



The Ormstown Institute Picnic.

and will then travel to each Branch in the Dominion.

Social activities consisted of visits to the Navy League at Prince Robert House and a trip to the Royal Canadian Naval College at Royal Oaks where we learned of what these organizations are doing and where we spent a pleasant tea hour. On the first afternoon, we also celebrated the birthday of Mrs. A. Watt, M.B.E., president of the Associated Country Women of the World, with a tea and presentation which was to convey to her an expression of our esteem.

We were, also, the guests of the Department of Agriculture of British Columbia at a delightful banquet in the hotel with the Minister of Agriculture, the Hon. K. C. MacDonald, acting as host.

From all these experiences, one realizes just how great a Canada is ours and that it is our responsibility to do all we can to keep it free and peace-loving.

Huntingdon District Greets British Visitor

Miss Elizabeth Christmas, representative of the National Board of Women's Institute, England, who has been touring Canada, was an honored guest of Chateauguay-Huntingdon county during her stay in this province.

Miss Christmas, who was the guest speaker at the gathering held in the town of Huntingdon, spoke of the affection and gratitude felt for Canada by the British In-

stitutes. She thought the homes were the "centres of sanity" during war time and spoke of the work of the W.I. in strengthening these "centres." Training had been given through the Institute in cooking vegetables and help had been given in making them all better cooks amid the rigours of rationing. She said the women of Britain were prepared to see rationing go on for some time yet as the need in Europe is greater than ever. She also mentioned the basket-making project taught in some centres.

Miss Christmas felt the greatest work of the Institute was the chance given each member to develop her personality thus gaining confidence in her ability to be of service in her community.

Thanks were movingly expressed for the generous gifts sent from Canadian Institutes and the kindness and hospitality shown the English boys training here in the Commonwealth Air Training Scheme. Mention was also made of the wonderful welcome given war brides.

Mrs. D. F. Orr, county president, who presided at the meeting, thanked Miss Christmas for her message which should help in cementing still closer the ties of friendship between our organizations.

Mrs. W. C. Smallman, provincial president, was also present at this rally of Institutes from that district.

Prior to the meeting a luncheon was served in honour of Miss Christmas giving the members an opportunity of meeting the charming English lady who had made many warm friends on her visit to Canada.

The Community Hall at Way's Mills

The need for community centres is recognized in our present-day world. Such was not the case, however, twenty-five or so years ago. It is due to two women of vision and foresight, Mrs. Clarissa Clark Bean and Mrs. Elizabeth Davidson Cramer, that Way's Mills in Stanstead County now has such a centre. Perhaps it is hardly necessary to say, of course, they were Institute members. Isn't that just where we find such women.

The Beans donated the land and Mr. Cramer was put in charge of the work. The entire district was canvassed by these energetic women and everyone promised either money or work. Various social events were also arranged to raise money with the result there now stands in this community a commodious hall, finished with a stage, and a well-equipped dining room and kitchen below, the whole lighted by electricity.

An interesting evening was held recently when a beautiful memorial was unveiled to the memory of those two charter members who had built better than they knew. A supper was served to guests from the county and a program of music and addresses enjoyed. A feature of the event was a letter from a past president, Mrs. W. H. Holmes, giving



The Community Hall at Way's Mills has a good stage and a well-equipped kitchen and dining room below.

the human interest side of the story. Mrs. Holmes, who was unable to be present, is also a charter member and, incidentally, our first county president, Way's Mills having the honor of being the first branch organized in this county.

This community is to be commended for thus honoring these energetic and public-spirited women to whom they owe so much.

A Month With the W.I.

Nearly every branch reported its delegate to the provincial convention giving evidence of an almost complete representation at that gathering. Another general feature is plans for filling ditty bags again this year, in some cases in increased numbers, striking proof that this form of service is being maintained.

Argenteuil County had a novel publicity stunt at the Lachute fair. Booths were arranged representing the different departments of W.I. work and pamphlets given out pertaining to that work. An interesting project which other counties might profitably emulate. A competition in handicrafts, a display of farm magazines from Canada and overseas, an exhibit of Chinese articles and costumes of other lands were also a part of their project. Frontier branch had charge of the agricultural booth at this fair and the Chinese articles displayed belonged to them. A picnic was held at the close of their regular monthly meeting. Many guests and a large group of children attended, sports and games were organized and prizes given.

Bonaventure. New Carlisle heard a paper on "Tuberculosis." Prizes were given in local schools and a very successful dance netted \$141. New Richmond held two social evenings and used sunshine bags to raise money to defray expenses of prizes offered in local school. The pupils of the primary grades were entertained at the home of a member. "Salmon on the Cascapedia River," was the subject of a paper.

Compton. Canterbury is planning ways and means to help the finances. A salad supper, white elephant sale, apron and food sale and dance are on the program. Brookbury held a miscellaneous shower for a local bride-to-be, the W.I. giving a pair of wool blankets. Gifts were presented to the teachers and candy and fruit to the pupils at the closing of school. A birthday card shower for local girl in the hospital and coffee donated for party for two returned men were also part of their activities. East Clifton had an interesting reading, "I Believe in Canada." Plans were made for a joint picnic of Sunday School and W.I., the latter donating prizes for sports. A wedding gift had been sent to a member previous to the meeting also a shower for a new baby. This branch entertained the county at their annual meeting.

Chateauguay. Howick had a demonstration by Miss Betty Roy, making of tablemats on a small loom. "Travel Talks," and paper "Saving of Sugar," with a recipe for jam-making were other features of the program. Aubrey-Riverfield welcomed a war-bride to that community. An auction sale of articles donated by the members was held at the meeting making a satisfactory addition to the treasury. Hemmingford had demonstrations of handicrafts and bathing and dressing new-born baby. A quiz was enjoyed and pupils of higher grades were invited to attend and participate. Ormstown enjoyed a picnic.

Huntingdon. Dundee had short talks on "Women Doctors on Active Service," "Women in International Affairs" and "Magna Carta." "Don't be a perfect wife" was subject of an entertaining discussion. Mrs. Smallman told of her trip to British Columbia.

Franklin Centre heard a talk on "Sugar's Role at the Front and the uses to which it is being put."

Megantic. Inverness had a discussion on subject of roll-call "Does it pay to work and leave the child behind?" A paper on Child Welfare was read by the convener.

Missisquoi. St. Armand held a food sale at their meeting with very satisfactory results.

Pontiac. Bristol sent boxes of cheer to shut-ins and sold tickets on cushions, the proceeds went to the Red Cross. A concert was held for the same purpose. Demonstration was held on "How to make bound buttonholes and pockets in boy's pants." A paper on "Care of Food in Summer Time" completed the program. Shawville donated \$50. to Soldier's Welcoming Committee and an equal amount to cemetery fund. Clarendon gave prizes in two local schools. A true or false contest was held and a discussion on "Emergencies in Home Nursing."

Richmond. The county is buying a booklet entitled "Parliamentary Laws at a Glance." This is to be loaned to the different branches in turn. The county W.I. is sending a gift to a member celebrating her 65th wedding anniversary. Gore made plans for a picnic. Roll-call was answered by a joke, and a quilt was made. Cleveland also made plans for a picnic. Gifts to be used in ditty bags were handed in as response to roll-call. A paper on "Progress of Women," was enjoyed. Four new members were welcomed and final plans made for enrolling under the Blue Cross Hospital Plan. Richmond Hill held two contests, aprons and fancy breads. The Blue Cross Hospital Plan was outlined by a past president, Mrs. Watson, and plans made for a dance which has since been held successfully. Spooner Pond donated \$10. to Soldiers' Reception Fund and gave subscription to library. Mrs. Watson also spoke at this meeting on Blue Cross Hospital Plan. Contests were held on cakes, cookies and aprons. A quilt was handed in to raise money and a variety supper held. Gifts to a member who has moved away and for a wedding anniversary were also mentioned.

Rouville. At Abbotsford articles were handed in as response to roll-call and sold to augment the funds. An old-fashioned spelling match was held.

Shefford. South Roxton entertained the grandmothers of the community. Humorous readings were given and contests held. A poem composed by the president in honour of the occasion was an interesting feature of this meeting. Granby Hill replied to roll-call by an article made from a cotton bag. This branch holds a monthly raffle each member in turn donating an article not over fifty cents. Tickets for ten cents are sold, visitors helping out, and the money thus raised used for their work.

Sherbrooke. Ascot heard address by Mrs. Kuhring, "Homemakers need for Leisure and Means of Securing Same." A presentation was given to a former president at her golden wedding. A successful rummage sale was held. Brompton Road gave \$5. for prizes in local school. Several of the members have joined the Blue Cross Hospital Plan. Mr. Ashton Tobin, K.C. was guest speaker, his topic "The Importance of Making a Will."

Stanstead. Ayer's Cliff W.I. has formed a committee on community recreation for the young people and hope to start work in September in cooperation with the local I.O.O.F. Roll-call, name a war hero or a suitable war memorial brought some good suggestions for the latter.

Members of the county executive were present at this meeting to start plans for the annual county project, the operation of the dining hall during local fair. Dixville held a most successful white elephant sale, also a supper and bingo party. A kitchen shower was given a newly married couple. Way's Mills has enrolled in Blue Cross Hospital

Association. A sunshine basket was sent to a shut-in. Three new members joined at this meeting. Notes on Agriculture and Education were read and an excellent paper on "What Canada Means to Canadians." Tomifobia held social evening, the gentlemen being invited for a game of cards. Four new members joined. Plans were made to offer prizes in school again for the coming year.

Gaspe. Wakeham heard a report of their county meeting. Two new members were added to the roll. A very successful dance was held with the orchestra of H.M.C.S. Pat Ramsey, in attendance.

Gatineau. Wakefield held a picnic on the lawn at Mrs. Brighton's. A very interesting and instructive talk on the countries of Latin America was given by Mr. Brighton who had been trade commissioner to these countries. Three articles were sent to an art exhibit in Hull and money voted toward entertainment of returned men. As the date of the meeting was the birthday of a member she was presented with a beautifully decorated cake and a gift. A box of good things from the lunch was sent to a shut-in.

Notes from the 31st Q.W.I. Convention

The 31st annual convention of the Q. W. I. will be recorded as one of the most successful yet undertaken. The beautiful setting of Macdonald College and ideal weather, coupled with a large attendance of enthusiastic women, all combined to make this possible. A carefully planned and well-balanced program with speakers of exceptional merit, each one an authority in his own line, were also important contributing factors.

A unique feature of the convention was the presence of two French Canadian women, Madame LeBeau representing Mr. Emile Gauthier, Director of Handicrafts and Home Economics, Dept. of Agriculture, Quebec, and Madame Henri Vautelet O.B.E., Member Economic Advisory Committee, Montreal. These ladies, speaking fluently in English, held the interest of the members with their charm and eloquence.

Madame LeBeau brought greetings from the Dept. of Agriculture and made a plea for greater understanding between the rural women of Quebec. Her address was felt to be of such value she was asked to repeat it on Wednesday for the benefit of the delegates who were unable to arrive in time for the opening session. This thought of unity, cooperation and racial understanding was the ever recurring theme running through the whole convention, emphasized in its varying angles by speakers with messages of importance to rural women and covering every phase of Institute work.

Addresses, "For Home and Country"

Madame Vautelet in her address, "The Rural Woman at the Cross-roads of Citizenship," said that too long we had been good little girls and did as we were told, we

must grow up and do our own thinking. Women represent about 55% of the voters and they must learn to take a more energetic part. "We can do anything in the world if we want to badly enough," the speaker continued, "and until we can improve rural conditions we cannot hope to keep our young people on the farms." In the Institute we should study social problems and train ourselves for citizenship as women. It is not enough to get out and vote but actively to "candidate." "Some women say, 'I am not interested in politics, it is too dirty a game.' I suppose they would also say, 'I cannot touch my baby, he is too dirty,' where is the difference?" said Madame Vautelet. Every woman should make it her business to be definitely interested in politics. No women, as yet, are on policy-making boards but they should be as they are more concerned than men in good health and the stability of our social order. She concluded by saying, "Democracy is a small private shrub, growing in our own back yard. See that we nurture it carefully."

Dr. Astbury on Education

An intensely interesting and thought-provoking talk, "Some Present-day Objectives in Education," was given Wednesday morning by Dr. J. S. Astbury, B.A., LL.D., of Baron Byng High School, Montreal. Our human institutions are changed in their objectives, declared the speaker, by the impact of public opinion. At one time the trend was toward "rugged individualism" in nations as well as communities and individuals. Today all that has been changed. The world-wide trend is interdependence, integration. It symbolizes what is happening in education. The modern school looks to the integration of the child within himself, body, mind and spirit. Subjects are taught not merely as

lists of words or dates to be remembered but as they are related to human experience. Competition is not stressed but morality, health and social responsibility. "It is much easier to store a mind than to develop a personality," concluded Dr. Astbury, "The teaching profession is, perhaps next to the ministry, the noblest of callings and requires intelligence and skill of a high order. Here are two ways in which the Institute can assist, first, recruit your brightest minds for this great task and, second, encourage and assist them in every way possible."

Dr. Pett on Nutrition

Another practical address was heard Wednesday evening when Dr. L. A. Pett, Director Nutrition Division, Dept. of National Health and Welfare, Ottawa, was the speaker. Dr. Pett, who attended the Hot Springs conference, quoted examples to show how great a task it is to reconcile the extremely varied viewpoints of the different nations. He stressed the fact that the first conference of the United Nations was on food, nutrition and agriculture and was also the first conference to show a real interest in human welfare. "We should make a study of nutrition and apply it in our homes," he stated, "if we want to give our people the vitality and vim that should be theirs. No country has all its people sufficiently nourished, that is a problem yet to be solved. If we have food here and people there who need it we must bring them together to assure a fair measure of prosperity in each country." At the conclusion of the address a film, "Food as it might be," vividly summed up the subject discussed.

The Rural Home

"The Canadian and the Rural Home," was the subject of an address by Dr. Charlotte Whitton, C.B.E., Ottawa. Interspersed with wit and humour, Miss Whitton gave a comprehensive picture of the position of the rural home-maker. One third of our population is on farms and from these rural homes and agriculture come the stability, sturdy independence and vigour of our nation. The maintenance of farm and home life must be made easier, she claimed, especially the position of the women. An improvement program is needed with rural housing and health the two outstanding questions. Other factors to be considered are economic parity of living, right to a gainful occupation, enough food and knowledge of its use. Only one third of the rural homes in Quebec have water in the house, out of that number only one in ten have bathrooms and only one quarter have electricity. Many of these problems call for community action and should have a policy of community management.

An address on "Remodelling the Farm Home," by Prof. L. G. Heimpel, M.S., of the Dept. of Agricultural Engineering, Macdonald College, gave many practical suggestions. Farmstead planning, which included suitable location of the house, was thoroughly discussed by Prof. Heimpel. Suggestions as to size, construction, floor plans, insulation, heating and water systems were given in detail. Interesting

lantern slides were used by the speaker to illustrate the various points discussed. At the close of his address the meeting was thrown open for questions, the ladies taking full advantage of this opportunity to obtain expert advice on such varied problems as "What makes our chimney smoke?" and "How do you build a kitchen cabinet?"

President's Address

Mrs. Chas. Smallman, provincial president, acted as chairman at the opening and closing sessions. Miss Alice Dresser and Mrs. R. Thomson, vice-presidents, assisted during the rest of the convention. Mrs. Smallman in her address brought her usual message of practical and sound advice. Quoting a poem, "When I return," she felt all service men should not be met with a brass band and urged tact and consideration in facing this situation. "We must help them get back to normal life," she said, "and make them understand our need of them." The success of the W. I. depends on our efforts, declared Mrs. Smallman, and asked the delegates to work to increase the membership. Referring to the cordial address of welcome given by acting vice-principal, Mr. R. Summerby, M.S.A., she expressed the thanks and appreciation of the Q. W. I. to Macdonald College for the generous support they have always given the organization. Grateful mention was also made of the Dept. of Agriculture, Quebec, for their assistance and cooperation. Mrs. Smallman gave a report of the recent biennial convention of the F. W. I. C. This was held in Victoria, she and Mrs. C. E. Petch attending as representatives from the Q. W. I.

Visitors at Convention

Mrs. Cameron Dow, president F. W. I. C. and a member of the W. I. at Port Daniel West, was an honoured guest. Her suggestions always prove of value at both board sessions and convention.

Mrs. Alec Ames, formerly Miss Barbara Fletcher, was also present at the board meetings, her contributions being much appreciated.

Reports

Miss Evelyn Walker, who has made many friends among the Q. W. I. since starting her work as demonstrator this spring, gave an interesting report of the general activities of the organization. A gratifying increase in membership was noted. There were now 90 branches in the province with a total membership of 1800. One branch had re-organized under a new name, Cavignol, with membership increased from 7 to 37. One new branch was reported at Wakeham in Gaspe county and the first junior Institute in the province was organized at New Carlisle. Efforts to increase interest in the W. I. among young women was urged and Mrs. T. H. Kirby was asked to take charge of that work. The report of the treasurer, Miss A. Pritchard, showed a very satisfactory financial condition. After meeting all obligations there was a balance on hand of \$866.85.

The convenors' reports gave a striking picture of what has been accomplished in the various departments of

Institute work and presented plans for the future. Interest in the Blue Cross Hospital plan is steadily increasing, reported Mrs. G. E. LeBaron of Welfare and Health. She urged the members to have more discussions instead of "papers" in their meetings.

The Home Economics convenor, Miss M. L. Kezar, gave a very comprehensive report. She urged the members to be "homemakers" not merely "housekeepers" and asked a warm welcome be given the brides coming with the boys from overseas.

Mrs. G. F. W. Kuhring, National and International Relations, noted a growing consciousness of the need for further information on civic matters. Several branches were commended for their study of the McWilliams and Marsh reports.

In Education, Mrs. R. Patterson's report showed the

usual interest, school grounds improved, equipment purchased and prizes given. In adult education support had been given in many branches to the Farm Forums and film showings. McGill Travelling Libraries had also been ordered by many branches. The Q. W. I. has been asked to continue its work for Home and School Associations. Mrs. R. Thomson was appointed to represent the Institute to the National Federation of Home and School Associations.

The many problems of the day relating to Agriculture have been discussed by the branches, reported Mrs. H. D. Yates, convenor, and the usual support given school fairs and calf clubs. The War Services report showed no slackening in this work. The sum of \$972.75 had been raised for the Self Denial Fund. Mrs. Smallman asked that this form of service be kept up.

Parents and Children

by Mary Avison

Books and Reading with a purpose

Enter the main door of the new high school in Halifax. In front of you stands, not the principal's office, not an auditorium nor a class room, but an open door. Over its lintel is the one word: LIBRARY. After school hours, the librarian is proud to show you around and to explain that some of her school time is given to teaching English and that all the classes use the library for educational and for pleasure reading during the school day and afterwards.

In a small mining town on Cape Breton Island, an English-speaking sister nurtures a growing library in what had been the cellar junk-room of a school. Now it is well lighted and bright with varnished siding; its high windows are fresh with green and white curtains; it is furnished with sturdy home-built tables and chairs in average and small sizes. Gay posters, which might have been done by older pupils, encourage interest in books and direct to various sections, which are beginning to fill up with attractive new books. Children's picture and story books, books on nutrition, on travel and on gardening, vie with those on history, politics and the social sciences for the reader's attention and school children take books home for their parents as well as for themselves. Through its stimulus and Sister's aid—more and more homes are learning to use books, to know what they want to read and where to find it.

In Prince of Wales College, P.E.I., hangs a map dotted at almost ten mile intervals, with pins that mark regional libraries. The central library stacks are rather dull because all the really vital and valuable books are "out"; but the files of cards show how many are in use through local committees. In town halls, in regional library buildings or offices, units are cared for by part-time librarians, housewives or farmers, in schools by teachers or pupils. The

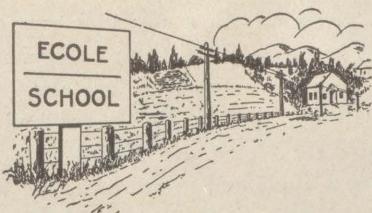
Charlottetown branch is library and art gallery too, gay with daffodils and friendly because of the interested welcome of the librarian. A continuous stream of people flows through with books to exchange. Any school can have a branch library and requisition the books particularly desired by study groups or individual readers in their locality.

The Quebec Federation of Home and School Associations this past winter sponsored leadership training and study groups in parent education. Some of the results were:—one Home and School Association purchased \$35.00 worth of books and pamphlets for a parents bookshelf in the Principal's office, two groups began to raise book funds of their own, and several others are campaigning for Parent Book Shelves in their schools.

These things have been done because people, often in small groups, sometimes just as one individual—believed books are essential.

Books are the tools of learning. A carpenter may start with a hammer and saw, a gardener with a spade and a rake, a cook with a pot and a fire, a seamstress with thread and needle. But, pretty soon, they want more tools, more and more as they become more efficient and more active in their own field. So, too, with education. In schools and communities, children and adults need the tools of learning. Growth and thought languish where people are starved for contact with the worlds that books can make available. We must be prepared to work for them, to insist on them and to find money for them,—for ourselves and for our children.

Now is the time to begin:—Order a travelling library. Get a group together and exchange the books you have. But don't stop there. Build up the interest; add to your numbers; make plans for the future; expand your resources. Read and grow with your children and your community.



LIVING AND LEARNING



People and Government

by R. Alex Sim

Camp Macdonald in its fifth session faces the issues of the time, and teaches the skills we need to face them.

The greatest single problem facing a modern democracy is to discover how a government of a big, busy country can carry on efficiently, at the same time represent the people, by working in their interests on all occasions, and by knowing their wishes at all times.

This does not put the strain on our elected representatives and the civil service that might appear at first glance. Indeed, it would make their duties immeasurably lighter and more pleasant.

But it does put a definite burden on the people: John Doe, Joe Doake, the Smiths and the Joneses. War also, and depressions put a burden on Doe, Doakes & Co., and it is up to them to decide whether they want to do a little thinking about public issues, a little discussing of public problems, or whether they wish to be plunged into depressions every ten years, and into wars every twenty-five years.

There is no easy solution to this question. There are possibly many partial answers. The adult education movement in Canada feels that it has discovered a very important answer to the problem of helping people participate in government.

I refer to the Farm Forums, the Film Circuits, and the Citizens' Forum. Not simply to these programs themselves, but to all their exciting by-products; the action projects, the new interests, the developing of understanding. Any one who has been close to the work has ample evidence of these achievements.

Adult Education in Canada has not gone far, yet. It has many imperfections and shortcomings, so far. It is the purpose of Camp Macdonald — SCHOOL OF COMMUNITY PROGRAMS — to pay attention to these problems, and to try to discover new principles of work, and to develop leadership skills.

The Principles

Government by the people starts from the bottom. So does education. We have discovered that the responsibility



Adult campers enjoy the informality of camp and at the same time the facilities and staff of a college course. Camp Macdonald will occupy this year the spacious site of "Camp Memphremagog for Girls" owned by Miss D. L. Gass.

and capability of a people's government can be supported best by three methods: study in a group, action in community, expression and information as a mass of people.

In order to study intelligently the problems confronting us, whatever they are, we form study and discussion groups. Several of these groups may make up a community and it is the community which can, in most cases, act in a manner which the group, after careful discussion, decide is desirable.

Then there are problems which confront the whole nation, in which facts and opinions have to be made known to the whole mass of people. Out of these needs there have developed three definite approaches of the Adult Education movement. Education through study groups, Community Organization, and Mass Education by means of radio, films and the press.

Various programs have to be worked out and people who are planning, directing and carrying out these programs must have a great deal of skill. Leaders are not born; they have to be taught and trained in the functions and responsibilities of democratic leadership.

Skills

A chairman of a discussion group and the secretary need to familiarize themselves with their duties. They have to learn the methods of discussion. How to guide an argument without dominating it is a skill that requires thought and careful deliberation.

The same applies to the leader of a community sing song or other recreation. Drama is very useful for the expression of some ideas, but how to use drama and to write and produce it has to be learned. Handicrafts are a very effective outlet for the creative ability of people. We have to foster that.

In carrying out a mass education program we must know how, to what extent, and how successfully Films and Radio can be used, and what their limitations are. How much and what sort of aid in our program can we expect from posters and displays. Written publicity is one of the most effective means of mass education. "The pen conveys a thought a thousand miles". Modern publicity writing

has to be clear and concise, and has to "convey one's thought" several times "a thousand miles".

Education is essentially a matter of communication. The problems of the community, of Canada, and of the whole world will be solved more easily, if and when people can communicate with one another. Then and only then can we have "government of the people, by the people, for the people."

Do You Want Films Next Year?

While we are planning for the next season commencing in the fall we would like to know if there are any additional communities that wish to be included in one of our film circuits. We would like to know whether all the communities now receiving films wish this service to be continued next year. Film showings may be combined with recreation, discussion, farm forum business, special speakers, and other events.

If you wish to have these films shown and have not had showings before write to Miss Dorothy Dearden, Film Agent, Adult Education Service, Macdonald College.

We cannot promise to fulfil all requests, but will try our best. Communities that have their own projector may be more easily included in this service.

Farm Forum Executive Increases Staff

Joseph Galway to combine studies at Macdonald College with Field and Office Duties.



A farmer leader from Ontario has been appointed by the Quebec Council of Farm Forums to the position of Assistant Secretary for a twelve-month period beginning Aug. 1st.

Until sixteen months ago Joe Galway was a farmer near Gananogue. He is a practical farmer who is also a graduate of the Kemptville Agricultural School. Not only did he operate his own farm, but he played a prominent part in

reorganization of old co-ops, and in the formation of new ones.

The addition of Mr. Galway to the Farm Forum will give the Quebec Farm Forums the most complete office and field organization of any province in Canada.

Mr. Galway's first duty will be to study the cooperative movement in Quebec, and to become familiar with the work of the Coopérative Fédérée. He will prepare discussion and study material on cooperatives.

During the winter months Mr. Galway will study half time and work for the Council half time. By sharing in the office and field work it is hoped that either he or the secretary, Mr. Sim, will be free to do more field work than has been possible for the last few years, as well as to give even more attention to office routine than has been possible in the past.

On June 18th, Mr. Galway met the Chateauguay-Huntingdon District Committee of the Quebec Council of Farm Forums. He was welcomed by the chairman, J. D. Lang. In replying Mr. Galway expressed his pleasure at the opportunity of working with the Farm Forums of Quebec. He had accepted the invitation to come to Quebec because of the opportunity of carrying on studies at the College, but also of learning more about the splendid adult education program that is being carried on in Quebec. He concluded by expressing the hope that he could be of real service to the Farm Forums of Quebec and that with an increased staff the activities of the Forums could be increased.

Joseph Galway, Quebec's New Assistant Secretary of Farm Forums.

Farm Forum organization in Eastern Ontario, and the organization of a County Federation of Agriculture.

In 1944 he joined the organizational staff of the United Farmers' Cooperative Company in Toronto. He has travelled in all parts of the province assisting in the



THE COLLEGE PAGE

News of the College — Staff, Students, Graduates

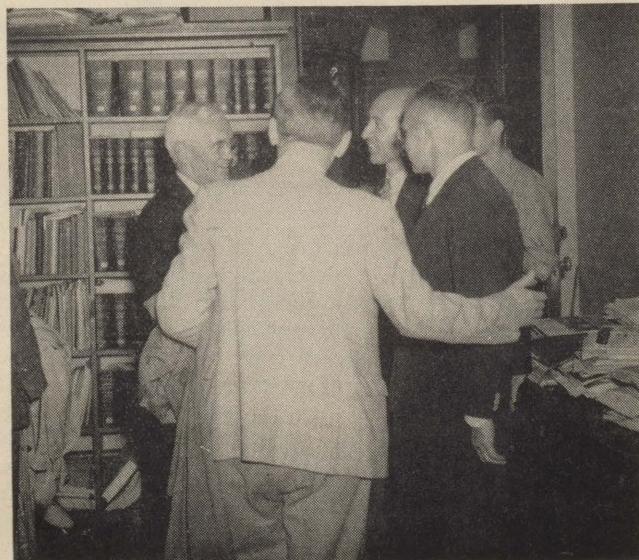
Discoverer of Penicillin Visits Macdonald



Acting-Dean Robt. Summerby and Dr. W. D. Macfarlane of the Dept. of Chemistry, Macdonald College with the distinguished visitor.

Below: Members of the staff meet Sir Alexander Fleming: Left to right—Sir Alexander, Dr. Macfarlane, Dr. F. S. Thatcher and Dr. P. H. H. Gray of the Department of Bacteriology.

Joseph Galway, Quebec's New Assistant Secretary of Farm Forums.



Macdonald College was paid a particular honour recently when Sir Alexander Fleming visited some of the College laboratories. Sir Alexander is the scientist whose fame resounds the world over because of his discovery of penicillin, the drug that has already saved thousands of lives, and daily permits surgeons to carry out operations that were once most hazardous, because of this drug's remarkable power to prevent infection.

As with most other brilliant scientific developments discovery was not purely a chance affair. True, Dr. Fleming had not planned his initial discovery of penicillin, but it was his scientific curiosity and the logical thought of a trained mind that made him wonder, "Why is that bacteria often die when a mold grows near them?" Sir Alexander and his co-workers hunted down that elusive substance that the fungus was spreading in minute quantity around itself and finally found it — penicillin. But other people had found substances that kill bacteria. Sir Alexander, however, then found whether penicillin could kill bacteria in the human body and was it injurious to humans in any way. Years before the war Sir Alexander has found the answers to these questions but peace time funds allotted for research were too meagre; interest in its great humanitarian possibilities was too difficult to arouse. War untied the purse strings and research made its customary war-time progress. Large sums were allocated for penicillin production so that today penicillin is available, cheaply, in ordinary drug stores.

Sir Alexander visited Macdonald to hear more of the work being done on the production of penicillin and a new "wonder-drug" Streptomycin, that kills some of the bacteria that are resistant to penicillin. The department of Chemistry in collaboration with the department of Bacteriology has learned how to produce penicillin and streptomycin from wheat residues and learned more of the nutritional needs of the penicillin fungus, particularly with respect to the amino acids that favour best production.

Dr. Fleming was interested too, in the product of the Bacteriology department which has developed a combination of certain dyes and the sulpha drugs that makes the sulpha more deadly to germs and also makes the sulpha drugs able to kill several types of bacteria that sulpha alone, nor penicillin will not kill.

So research carries on: the initial discovery of Sir Alexander has introduced a new era of therapy, because inquiring minds have had the opportunity to do research!

More Milk and Butter Fat Next Fall

The big demand and the good prices now prevailing for butter fat and fluid milk justifies extra effort on the part of farmers to produce as much of these products as they possibly can. It is hoped the good prices will continue but, whether they do or not, the wise farmer will aim to earn as much as he can while they prevail.

A seasonable procedure that will help farmers to produce extra milk and earn extra money this fall at small cost is to fertilize one or more hay fields immediately after the crop has been harvested, so as to increase the after feed either with sulphate of ammonia or with such a complete fertilizer as 4-12-6, or 9-5-7 or if it can be obtained, 3-15-6.

Sulphate of ammonia at the rate of 100 to 150 pounds per acre will greatly increase the amount of grass and clover this coming fall and will contribute some increase

to the hay crop in 1946. Any one of the complete fertilizers at 300 to 500 pounds per acre will add to this fall's yield of after feed and will ensure a good hay yield next year. An additional gain of the utmost importance, that will follow the application of any of the above fertilizers, is that the amount of sod and roots will be increased so that, when the field is plowed, more organic matter will be incorporated in the soil than would be the case if there were no top dressing of commercial fertilizer applied.

A ton of timothy hay contains about 18 pounds of nitrogen, 6½ pounds of phosphoric acid, and from 28 to 30 pounds of potash. This is rather more than would be returned to the land by a ton of ordinary green farmyard manure. If no fertilizers were applied, continuous crops of timothy would rapidly deplete the soil, and the same is true in a general way of other grasses.

Mutual Fire Insurance Members — Note

Farmers who belong to their own mutual fire insurance companies will find it in their best interests to exercise every caution possible to prevent fires.

Not only is it a matter of concern to the farmer himself but to his neighbours who must share in his losses.

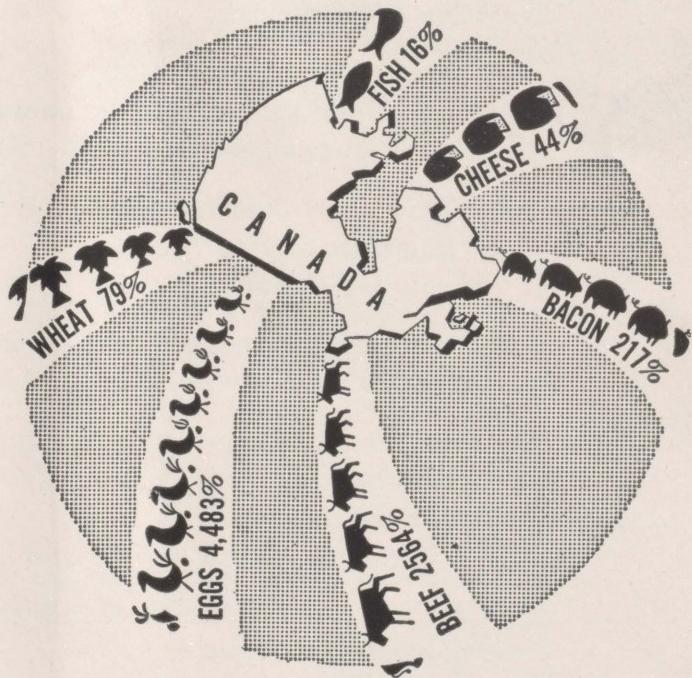
13 recommendations for fire safety have been listed, based on a study of fire causes.

They are: chimneys of substandard construction; sparks from dirty chimneys; smoke pipes and stoves installed without regard to radiation of heat; seasonal grass and bush fires; spontaneous ignition of hay through dumping badly cured hay; worn-out shingle roofs; lighted lanterns; mis-use of electrical equipment; threshing operations with gasoline power; gasoline vehicles stored in barns; matches and smoking in out-buildings; trespass by thieves; and lightning.

The recommendations for fire prevention on the farm call for having a roof ladder always at hand. It is also suggested that the farmer keep a few water buckets full and ready for use. Also, it is a good idea to have a few barrels of water on hand for instant use. Keep at least one standard two and one-half gallon soda-acid fire extinguisher on the premises.

GROWTH OF CANADA'S FOOD EXPORTS

(1939-1944)



Percentages refer to
1944 increase over
1939 figures.

	1939	1944
BEEF	3,873,200 LBS.	103,203,800 LBS.
BACON	187,825,000 LBS.	695,757,000 LBS.
EGGS	1,274,327 DOZ.	58,403,410 DOZ.
CHEESE	90,944,800 LBS.	131,429,200 LBS.
FISH	185,606 TONS	215,180 TONS
WHEAT	4,887,137 TONS	8,750,391 TONS

W. I. B. CANADA

CONGESTION IN CATTLE MARKETING

during October, November
and December

SHOULD BE AVOIDED

DURING the last three months of 1944, Canadian packing establishments were unable to clear promptly record live stock marketings.

While this fall's hog marketings may be below those of last year, cattle marketings will be unusually heavy.

To avoid a repetition of last year's market congestion during October, November and December—

- 1 Marketings of plain cattle and dry cows, particularly those of dairy breeding, and of bulls, should be speeded up during August, and kept at a high level during September.
- 2 Throughout September, steers and heifers in good condition should be marketed promptly.

Continuous purchasing and shipment by the Meat Board of beef of all grades to fill the requirements of the United Kingdom and the liberated countries will provide rapid clearance of packers' coolers and storages.

Beef floor prices, maintained by such purchasing, can be fully reflected in cattle prices generally, only if marketings are spread over as many weeks as possible.

Full advantage should be taken of this year's opportunity to discard, at profitable prices, old cows of both beef and dairy breeding, and younger cattle of undesirable type.

Market early and avoid congestion!

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AGRICULTURAL SUPPLIES BOARD
Dominion Department of Agriculture, Ottawa
Honourable James G. Gardiner, Minister

